COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN	)	
WATER COMPANY FOR	)	**CASE NO. 2007-143**
	)	

DIRECT TESTIMONY OF LINDA C. BRIDWELL, P.E.

April 30, 2007

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1. Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Linda C. Bridwell and my business address is 2300 Richmond Road, Lexington, Kentucky 40502.

2. Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Southeast Region of American Water Works Company, Inc. ("AWW") as the Manager of Engineering for Kentucky and Tennessee.

3. Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THIS COMMISSION?

A. Yes.

4. Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a B.S. degree in Civil Engineering from the University of Kentucky in 1988 and I received a M.S. degree in Civil Engineering from the University of Kentucky in 1992 with an emphasis in water resources. I completed a Masters of Business Administration from Xavier University in Cincinnati, Ohio in 2000. I am a registered Professional Engineer.

I have been employed by American Water Company since 1989. I worked as a distribution supervisor for Kentucky American Water ("KAW") until 1990 and was promoted to Planning Engineer. In July 1995, I was promoted to Engineering Manager. In January 1998, I was promoted to Director of Engineering. In July 2004, I accepted the position of Project Delivery and Developer Services Manager for the Southeast Region of American Water, responsible for Kentucky, Tennessee, and West Virginia. In 2006 that title was changed to Manager – Engineering, and responsibility for West Virginia was shifted to someone in West Virginia. I am an active member of the American Water Works Association (AWWA), served as president of the local chapter of the American Society of Civil Engineering (ASCE), president of the State section, an officer in the local chapter of the National Society of

Professional Engineers (NSPE) and a State officer. Since 1991, I have served as an Adjunct Professor at the University of Kentucky in the Civil Engineering Department, teaching "Water Quality and Pollution Control" and the "Introduction to Environmental Engineering." I serve as a member of the Civil Engineering Industrial Advisory Committee at the University of Kentucky. I served as a Commissioner on the Kentucky Water Resources Development Commission established by Governor Patton and currently serve on the Board of Directors for the Kentucky Infrastructure Authority.

5. Q. WHAT ARE YOUR DUTIES AS MANAGER OF ENGINEERING?

A. My primary responsibilities encompass the coordination of the Engineering Departments in Kentucky and Tennessee, which includes the planning, development, and implementation of all aspects of construction projects. This includes working with all new main extensions and developers, water treatment plant upgrades, new construction, and network facilities improvements. I was involved in the development of the 1992 Least Cost/Comprehensive Planning Study ("LC/CPS") for KAW, including coordinating local input, regionalization and data collection. I supervise the implementation of the recommendations of the LC/CPS in both KAW's and Tennessee American Water's ("TAW") investment plan and construction schedule. I also coordinate the development and implementation of all of the investment plans and monitor the actual expenditures. I am responsible for updating the demand projections and monitoring the source of supply for KAW. I coordinate the provision of technical assistance to all other company departments as needed. Since 1997, I have been involved directly as the project manager for the Bluegrass Water Project and since December 1999 I have served as KAW's representative to the Bluegrass Water Supply Consortium/Commission ("BWSC"). This position is similar to my previous position as Director of Engineering for KAW with the increased oversight of TAW. I remain located in Kentucky and am heavily involved with the issues here.

6. Q. WHAT WILL YOUR TESTIMONY ADDRESS?

A. My testimony will describe the preparation of the investment plan and detail the information for the construction projects as submitted in this case. I will also address tap fees, conservation initiatives, and operational efforts including leak detection, water quality, and deferred maintenance. I will also address operational costs of fuel and power, and chemicals.

7. Q. PLEASE DESCRIBE THE FACTORS USED IN THE PREPARATION OF THE FORECAST PERIOD DATA AS IT RELATES TO THE CAPITAL CONSTRUCTION.

A. The Company's capital investment plan can be divided into two distinct areas: 1) normal recurring construction and 2) major projects identified as investment projects ("IPs"). Normal recurring construction includes water main installation for new development, smaller main projects for reinforcement and replacement, service line and meter setting installation, meter purchases and the purchase of tools, furniture, equipment and vehicles.

Recurring construction costs are trended from historical and forecasted data. Estimates are prepared for the installation of new mains, service lines, meter settings and the purchase of new meters based on preliminary plats from the appropriate governmental planning agencies and consultations with developers, homebuilders and engineering firms.

Purchase of tools, furniture, equipment and vehicles are based on needs. Each item is reviewed independently and an itemized list of expenditures is prepared. Estimates are made based on current year pricing.

The intent of the planning process is to provide a broad and comprehensive review of facility needs that will allow us to then establish a general guide for needed improvements over a short-term horizon. These improvements will enable KAW to provide safe, adequate and reliable service to its customers to meet their domestic, commercial and industrial needs; provide flows adequate for fire protection and

satisfy all regulatory requirements. Some projects continue to have their origin in the LC/CPS. The plan provides a general scope of each project along with a preliminary design. The criteria for evaluating the various system components are engineering requirements; consideration of national, state and local trends; environmental impact evaluations; and water resource management.

The engineering criteria used are accepted engineering standards and practices that provide adequate capacity and appropriate levels of reliability to satisfy residential, commercial, industrial, and public authority needs, and provide flows for fire protection. The criteria are developed from regulations, professional standards and company engineering policies and procedures. Demand projections, based on historical data and usage trends, are utilized in evaluating future system needs. Regionalization opportunities are evaluated to determine if a consolidated solution to water problems in a particular area is feasible or if management service opportunities are viable.

Sources of supply are evaluated based on quantity and quality. There must be sufficient quantity to supply the system's needs. There must be sufficient quality to provide, through treatment, finished water that meets all federal and state regulations. Sources of supply must also have sufficient allocation rights to enable average and maximum demands to be met.

Treatment and pumping facilities are designed to reliably meet projected maximum day needs. Storage facilities are designed to provide the recommended volume to equalize the plant's pumping rate on a maximum demand day. With this approach treatment facilities need only be designed to meet the projected maximum day demand, although during that day hourly demands will exceed the treatment capacity's maximum rate. Storage facilities are also designed to provide the volume of water necessary for fire protection up to the maximum flow and duration addressed in the most recent Insurance Services Office (ISO) municipal grading schedule.

Pipelines are designed to meet two conditions of service. They are expected to deliver projected peak hour customer demands while maintaining system pressures at 30 psi or greater in accordance with the Public Service Commission (PSC) regulations and to provide adequate fire flow identified by ISO while maintaining distribution system pressure at 20 psi or greater.

In developing the comprehensive planning study it was beneficial to review national, state and local trends, which can affect future planning. Nationally there has been a strong trend toward more stringent regulations affecting water supplies and treatment processes. Examples include increased protection of sources of supply, more stringent water quality regulations of finished water, increased regulation of treatment plant residuals, more frequent water quality monitoring requirements, and more extensive environmental laws affecting new construction and source development.

Where major projects are not specifically included as a result of the LC/CPS, the projected expenditure is based on preliminary engineering estimates, vendor quotes and other individual analysis.

8. Q. DOES KAW FOCUS ON COST CONTROL OF CAPITAL EXPENDITURES IN ITS NORMAL DAY-TO-DAY ACTIVITIES?

A. Yes. All significant construction work done by independent contractors and significant purchases are completed pursuant to a bid solicitation process. We maintain a list of qualified bidders and we believe that our construction costs are very reasonable. AWW annually takes competitive bids for material and supplies that are either manufactured or distributed regionally and nationally. We have the advantage of being able to purchase these materials and supplies on an as-needed basis at favorable prices. In the past three years, AWW also has undertaken a number of services and materials procurement initiatives to reduce costs through either streamlined selection or utilization of large volume purchasing power. Some of these initiatives that have directly impacted capital expenditures include the use of master

services agreements with pre-qualified engineering consultants, national vehicle fleet procurement, and national preferred vendor identification.

9. Q. HAS KAW CHANGED ITS METHOD OF IMPLEMENTING ITS CAPITAL PLAN?

A. Yes. In 2003, the entire American Water system transitioned to a new process for development and review of capital expenditures that used some of the best practices already implemented at KAW. This new process includes the formation of a regional Capital Investment Management Committee ("CIMC") to provide that capital expenditure plans meet the strategic intent of the business including introduction of new technology and process efficiency, assure that capital expenditure plans are integrated with operating expense plans, and provide more effective controls on budgets and individual capital projects. The CIMC includes the Regional President, Vice Presidents of Engineering, Finance, Operations, and Rates, and the subsidiary capital manager. The CIMC receives capital expenditure plans from each geographic area and reviews them for submission to the appropriate Board of Directors. Once budgets are approved the CIMC meets monthly to review capital expenditures compared to budgeted levels. Previously each investment project request was submitted in memorandum form to the Board of Directors, and changes had to be approved at the quarterly Board meetings. The new process includes fives stages: 1) a Project Need Identification defining the project at an early stage; 2) a Project Implementation Proposal that confirms all aspects of the project are in a position to begin work; 3) Project Change Requests, if needed (if the cost changes more than 5% or $100,000); 4) a Post Project Review; and 5) Asset Management. KAW personnel handle all of the stages, with oversight by the CIMC. All projects, including normal recurring items, have an identified project manager responsible for processing the stages of the project. The focus of the CIMC, along with the monthly meetings has allowed KAW to be more flexible with changes that inevitably occur during the course of implementation of large construction projects. KAW made tremendous progress in its delivery of capital expenditures over the last ten years in regard to schedules, budgets, and quality of delivery.

One of the most challenging aspects of planning capital expenditures continues to be determining the amount of construction that is required for individual municipal and state road projects. Some of these projects required significant capital expenditures on the part of KAW, but the company has no control over the schedule. KAW would be required to act promptly if the project is to stay on schedule, but sometimes would not be informed of project delays until waterline relocation was underway or nearly complete. It is a guessing game to determine which projects will be delayed and how long. Investment project funding is requested early in case a project remains on the road relocation schedule, but more often than not the project schedule will be delayed, sometimes even for years. In reviewing historical spending, it appeared that a consistent expenditure level proceeded each year but it was difficult to determine which specific project was going to be delayed. KAW has now created one project of major highway relocations and estimates projects anticipated during that year in the budget. These estimates are based on regular meeting with state and local agencies in charge of road projects. This process allows more flexible approval of capital expenditures as unexpected project arise, offsetting other projects that may be postponed. The flexibility of the CIMC process allows KAW to immediately address an increase or decrease in relocation projects due to highway work.

KAW has continued to make necessary investments in its system, investing $65,871,109 in its system over the last five years, net of advances/contributions/refunds. The CIMC process has significantly enhanced KAW's ability to develop, implement and monitor the capital expenditures in an efficient manner.

10. Q. IS KAW UNDERTAKING ANY ADDITIONAL CHANGES TO THE CAPITAL PLAN?

A. Yes. Beginning April 23, 2007 AWW has reconfigured the division of recurring capital expenditures, and changed the names. All of the schedules prepared in the case utilize the previous convention referring to Budget Items and Business Units

"80-97". Going forward, the capital budgeting and actual expenditures will be tracked under Budget Items and Business Units "A-S". This new convention will more appropriately define assets with work tasks and NARUC accounting. I will further explain the convention change in defining the capital expenditures.

11. Q. PLEASE EXPLAIN THE MAJOR PROJECTS PROPOSED FOR 2007 AND 2008.

A. KAW has proposed capital construction expenditures of $25,261,052 in 2007 net of advances/refunds/contributions including costs related to KRS II, and capital expenditures of $53,994,834 in 2008 net of advances/refunds/contributions and including costs related to KRS II. In 2007 there are projected $10,123,827 proposed for network infrastructure replacement alone, with another $7,217,660 projected in 2008. The new naming convention is used, with the previous convention in parentheses.

Item DV (80) This investment plan item includes the installation of new main, valves and hydrants that are funded entirely by others. This investment plan item may also include the replacement of existing components of water supply, water treatment, water pumping, water storage, and water pressure regulation facilities not funded by company expenditures. The majority of these expenditures are made through deposit agreements and as non-refundable contributions. The projected expenditure amount is developed through discussions with homebuilders, developers and a review of plats. Developers deposit projected expenditures based on average pipe installation costs from the previous year pursuant to our on-site main extension agreement. This item also includes fire services that are paid for by the requesting new customer, at the cost of installation.

Item A (82) This investment plan item includes new water mains, valves, and other appurtenances that are necessary to perform the work that is funded by the company; including upsizing of developer initiated extensions, company initiated and funded new mains that are not related to immediate growth such as new

mains that eliminate existing dead ends or provide new transmission capacity; and new customer initiated extensions in accordance with tariffs that may include some customer contribution (customer funded portion under abovementioned Item DV). This item may also include new mains that parallel existing mains to increase transmission capacity, provide reliability, or establish an additional pressure gradient.

Item B (81) This investment plan item includes the scheduled replacement, renewal or improvement of existing water mains including valves and other appurtenances that are necessary to perform the work. It previously was a part of Item 81, and now includes replacement of services in conjunction with those projects which was previously budgeted in the cost of service replacements.

Item C (81) This investment plan item includes the unscheduled replacement or restoration of existing water mains including valves and other appurtenances that are necessary to perform the work. It previously was a part of Item 81, and now includes replacement of services in conjunction with these projects which was previously budgeted in the cost of service replacements. This item is primarily used for emergency replacements.

Item D (81) This investment plan item includes the relocation of existing water mains including valves and other appurtenances that are necessary to perform the work, as required by municipal or state agencies. It previously was a part of Item 81, and now includes replacement of services in conjunctions with these projects, which was previously budgeted in the cost of service replacements. These costs are not reimbursable.

Item E (84) This investment plan item includes the installation of new hydrants, including hydrant assemblies and valves that are installed on existing mains or installed in conjunction with main extension projects, which are company funded. This item generally includes all public hydrants.

Item F (83) This investment plan item includes the replacement of leaking, failed or obsolete hydrants including hydrant assemblies and valves that are company funded.

Item G (86) This investment plan item includes the installation of new water services or improvements, including corporation stops and shut-off valves.

Item H (85) This investment plan item includes the replacement of water services or improvements, including the replacement of corporation stops, or shut-off valves. This budget item shows a reduction in 2007 because services previously scheduled in conjunction with scheduled main replacement projects are now budgeted along with the main replacement project in Item B or D.

Item I (88) This investment plan item includes the installation of new meters and meter settings.

Item J (87) This investment plan item includes the replacement or improvement of existing customer meters and meter settings with or without technology changes. Again, the cost of replacing the meter setting in conjunction with a main replacement project that may have been previously budgeted with Item 87, is now budgeted under Item B or D.

Item K (89) This investment plan item is for the replacement of existing Information Technology System Equipment and systems due to failure or obsolescence and new items to achieve efficiency or address new requirements.

Item L This investment item is a new division for the installation or replacement of existing SCADA Equipment and Systems. The acronym SCADA can be defined slightly different ways, but KAW generally prefers the definition as System Control and Data Acquisition, which is the computerized system for monitoring and operating the treatment plants and network facilities. AWW believed it more appropriate to further subdivide these important investment costs from general Information Technology Equipment costs.

Item M This new investment item is a division for Security Equipment and Systems that is separate from generally office and Operation Center expenses. This may include fencing, alarm systems, cameras, barricades, electronic detection or locking systems, software, or other assets related directly to Security.

Item N (90) This investment plan item is for the replacement or improvement of building systems, equipment or furnishings for offices and operations centers, including copy machines, fax machines, and phone systems.

Item O (91) This investment plan item is for replacement or new vehicles including trucks, cars and light trucks and accessories.

Item P (92) This investment plan item is for the replacement or purchase of construction, shop, garage, meter reading, and storeroom equipment. Laboratory equipment used to be a part of this budget item but has now been moved to Item Q with process plant equipment.

Item Q (93, 94, 95) This investment plan item is for the new purchase or replacement of existing components of water supply water treatment, water pumping, water storage, and water pressure regulation facilities, including associated building components and equipment. Replacements may be planned or made because of failure, or may include improvements. This item now also includes laboratory equipment and replacement of filter media used in the treatment process.

Item S (97) This investment plan item is for the planned preliminary engineering studies primarily used for planning purposes. At the initiation of a project, these capital dollars are transferred to the appropriate construction project. These expenditures were previously captured in the Preliminary Survey and Investigation Account, and while they are still designated as such, the creation of this item assures appropriate planning of those expenditures.

Additionally, the process includes investment plan items for capitalized tank painting. KAW has not proposed to utilize this item in the 2007 or 2008 investment plans. A cross reference table of the new budget items versus the previously named budget items is attached to my testimony as Exhibit 1.

Investment Projects

These projects are for facilities that are substantial in dollar amount. Projects approved in the immediate investment plan are identified by a hyphenated numerical system, the first number being the year the project originated and the second number being the number of the project within that year. Projects are also assigned an 8-digit business unit where the first two digits identify the subsidiary, the second two digits

identify the District within each Division, and the final four digits are the numerical project number. KAW's company number is (12) and the central division is (02) while the northern division is divided into districts of the former Tri-Village (30), Owenton (32) and former Elk Lake System (3). For sewer assets, Owenton is district (33) and the former Boonesboro wastewater is district (50). If the project is proposed but has not yet been approved it will be identified only by its description.

IP 12320507 Owenton Acquisition Water -- This project covers the design and construction of facilities anticipated in the acquisition of Owenton Water assets. This project was begun in 2006, with improvements to the chemical storage and feed systems at the treatment plant that allows for ammonia to be used, separation of the chlorine system for safety, and the extension of the Southfork Road water main in the network system. KAW is reviewing the potential for bulk storage improvements, security upgrades, and sedimentation improvements at the treatment plant between 2008 and 2010. The total project is estimated at $1,615,750. A proposed $167,995 is estimated for 2007 to finish the first project and begin review of additional needs. An estimated $824,836 is proposed for 2008.

IP 12300403 Owen County Main Extensions -- This project covers design and construction of new mains within rural Owen County. The Owen County Fiscal Court received grant funding for $750,000 for water lines in rural Owen County, of which they elected to utilize $400,000 in areas to be served by KAW. KAW agreed to provide matching funds of $700,000. In 2006, the Owen County Fiscal Court received an additional $750,000 in grant money. With the first phase, KAW installed 44,000 feet of main and a chlorine booster station. With the second phase, KAW is installing 84,390 additional feet of pipe on six roads and eliminating five existing dead end mains. The final $825,882 dollars are proposed to be spent in 2007, with no additional expenditures in 2008. The total project is estimated to cost $2,150,000 with KAW funding $1,000,000 of the project.

IP 12020204 Source of Supply Development Project -- This project includes preliminary design and professional services costs that have been incurred since 2004 for the development of a solution for the Source of Supply deficit. These

costs include KAW's contributions to the Bluegrass Water Supply Commission, labor expenses for working with the BWSC and preliminary to the current treatment plant development, and the cost for professional services for working with the BWSC or presenting information to the Public Service Commission. KAW has proposed to maintain this budget item throughout the construction to segregate the expenses of a joint partnership, but these costs will ultimately be transferred to the appropriate asset of the treatment plant and water main facilities. $330,000 has been proposed for 2007, with no additional expenditures in 2008 and a total project cost of $906,242.

IP 12020402/12020702 Major Highway Relocations -- This project covers for the design and replacement of major water mains in conjunction with highway improvements. Previously, KAW attempted to establish a separate business unit each year, but found that projects that were completed in phases were difficult to track. Kentucky American has since established this one business unit, and tracks individual projects each year by task orders under this business unit. Because this project has grown so large, new projects begun in 2007 will be assigned to the new business unit. The current project in 12020402 is the completion of the Phase I of the Clays Mill Road relocation for $1,203,479 in 2007 and no additional expenditures in 2008. The new projects include the relocation of facilities in Newtown Pike from I64/75 to Ironworks Pike, the relocation of US 25 near Ironworks Road, and the relocation of facilities at the Liberty Road/Todds Road intersection. Projects proposed for 2008 include relocations on Seventh Street in Lexington, Leestown Road, and Newtown Pike from Main Street to Seventh Street. 2007 additional expenditures are estimated at $3,850,000 and 2008 expenditures are proposed at $2,295,906. KAW estimates that $3,325,000 will be reimbursed by the Kentucky Transportation Cabinet ("KTC") in 2007, and $2,032,500 will be reimbursed in 2008.

IP 12020505 Replace Trac-Vac System at Richmond Road Station ("RRS") – This project covers for the design and construction of a new sludge removal system in the two sedimentation basins of the Richmond Road Station treatment plant. The existing system was installed in 1988 and worked well initially.

However, the system was based on sludge consistency and volume at that time. Changes in regulation have required two changes in coagulants to reduce disinfection by-products. These changes have resulted in more sludge being produced, as well as a different sludge consistency. Further, the sludge volume has also increased with the greater use of the Kentucky River raw water at the Richmond Road Station. The sludge removal system simply cannot keep up with these changes. Modifications to the system have made marginal impacts, but the basins must be removed from service at least once per quarter for manual sludge removal. This manual cleaning is extremely labor intensive and significantly limits the operations of the entire system. Projected construction expenditures are to replace the vacuum units and air hose system. An estimated $604,389 is proposed for 2007 for a total project cost of $944,341.

IP 12020506 Sludge Handling Improvements at Richmond Road Station – This project covers the design and construction of new facilities to process sludge at the Richmond Road Station. The current sludge thickeners that receive sludge from the Trac-Vac system are undersized for the volume generated by basin maintenance. Resulting excess must be stored and treated in backwash wastewater holding tanks. The current sludge belt press is also undersized leading to excessive production runs. This project was originally proposed for 2008, but during design of the Trac-Vac replacement system it became apparent that a design of the entire process would be more effective. $1,436,593 is proposed for 2007 with a total project cost of $1,921,041.

IP 12020502 Russell Cave Road Main – This project covers for the design and construction of approximately 34,000 feet of 12-inch main along Russell Cave Road to expand the impact of the new Russell Cave Road tank. The tank was placed in service in 2005 and operations will be optimized with the completion of the main. $20,000 is proposed in 2007 to complete the project of a total estimated $1,258,407.

IP 12020613 Clays Mill Road Relocation – This project originally included the design and construction of the first phase of a 20-inch main to be installed as part of the improvement of Clays Mill Road. During early 2006, these proposed

expenditures were moved to the Major Highway Relocations project, and this business unit is currently being used to define expenditures for the second phase of the relocation, from Higbee Mill Road to Harrodsburg Road. Currently $100,000 is estimated for design and preliminary work in 2007, and $750,000 is estimated for 2008.

IP 12020501 Ground Storage Tank – 3.0 MG – This project is for the design and construction of an additional 3.0 million gallon water storage tank in the Central Division distribution system. This project was identified in the LC/CPS and the 1993, 2002 and 2005 Storage Analysis. Originally proposed to begin design in 2006 with potential construction in 2007-8, the project was deferred in mid-2006 with the focus on the new WTP on the Kentucky River and storage facilities related to that project. There are currently no dollars projected in the base or forecasted periods, although the project will be listed on some schedules as an open project.

IP 120207XX Incline Car Replacement at Kentucky River Station ("KRS") – This project is the replacement of the mechanical car that travels between the Kentucky River intake and the treatment plant at the Kentucky River Station. The car covers a 380-foot vertical elevation change up a bluff and parallels a steep staircase. The system was originally installed in 1957. The car has periodically been out of service for mechanical repairs which inhibits monitoring of the intake station. Further, the existing car has a weight limit of 1250 pounds. With the installation of significantly larger intake pumps in 1992 and subsequent maintenance on those pumps, this weight limit has restricted maintenance. Parts in excess of the weight limit have to be barged, and the timing is dependent on river flows. A replacement system will be designed for greater reliability and higher weight limits. A proposed $250,000 is scheduled for 2007 and $900,000 is proposed for 2008 for a total project cost of $1,150,000. The project is expected to be completed in 2008.

IP 12020201 Leestown Road Main Improvements – This project is the design and construction for facilities from New Circle Road to Midway. Design of this project was completed in 2002, but the KTC appeared to have a project to widen

Leestown Road and construction was deferred. Although no construction expenditures are currently in the plan for 2007 or 2008, it remains on the IP list as the project may get quickly taken back up by the KTC.

IP 12020601 Valve House Upgrades at KRS – This project is for the design and construction of improvements to the valve house structures at the KRS. The five buildings have had numerous cracks and loose bricks since the early 1990s. They are critical to operations because the structures house the automated valves and control equipment for the Hydrotreators. The work was begun in 2006, and will be completed in 2007. A projected $60,735 is proposed for 2007 with a total project cost of $441, 000.

IP 12020602 Yarnallton Road Main – This project is for the design and construction of additional facilities in North Yarnallton Road to tie into facilities in Kearney Road. The proposed project will tie in a back feed from Georgetown Road to the Leestown Road area, thus providing increased reliability for the single feed out Leestown Road. Design was completed in 2006, but construction was deferred until the connections necessary for the new WTP were fully developed. No expenditures have been proposed in 2007 or 2008.

IP 12020508 Reliability Improvements – This project is for the design and construction of improvements at the RRS and KRS which will effectively increase reliability at both facilities. These improvements include the replacement of existing raw water intake pumps, which were installed in 1992 and whose efficiency has significantly eroded. It also includes the replacement of the raw water transfer pumps at the KRS to optimize operations of the raw water transfer facilities, the installation of a diesel generator at the RRS, and the installation of a second transformer at the KRS, which is critical for the expanded electrical load. A proposed $3,556,642 for 2007 and an additional $1,000,000 in 2008 will complete the project with a total cost of $5,500,000.

IP 12020607 New WTP on Pool 3 Kentucky River – This project is the design and construction of a new water treatment facility on Pool 3 of the Kentucky River near Monterey on the Owen/Franklin County line with a 42-inch treated water main to bring finished water into the Central Division distribution system with

one intermediate booster station and storage facility. The project is currently estimated at $160,000,000 and has been submitted for PSC approval through a Certificate of Convenience and Necessity Application as Case No. 2007-00134. A proposed $3,917,000 of construction expenditures in 2007 and $38,273,666 in 2008 are included in the CAPEX budget, but because the project will not be in service during the forecasted test year, none of the expenditures are included in rate base.

IP 12020606 Replace Parkers Mill Pump and Diesel – This project is the proposed replacement of the existing pump at the Parkers Mill Storage tank, the addition of a second pump at the facility for reliability, and the addition of a new diesel generator for additional reliability. The current pump will only produce 5.0 million gallons per day at the current hydraulic gradient and will be replaced with a 9.0 million gallons per day pump with a Variable Frequency Drive ("VFD") motor that will reduce energy costs and allow more flexibility in maintaining system pressure. The existing pump also has a diesel motor back-up that requires manual start-up. The new generator will allow shorter response times when power is lost at the station. The project was begun in 2006, and will be completed in 2007. Projected 2007 expenditures are $717,600 with a total project cost of $775,000.

IP 12020605 Mallard Point Pressure Improvements – This project is the installation of a booster pump station in Mallard Point subdivision that will elevate the hydraulic gradient to the existing customers in that area that routinely experience low pressure. Additionally, KAW negotiated a point of water sales with the Georgetown Municipal Water and Sewer System west of Mallard Point on Burton Pike. To maintain sufficient pressure during water sales, the Hall tank had to be sustained at a higher level, thus reducing the ability to turnover the tank for water quality purposes. This booster station will be located downstream of the Hall tank, thus maximizing the operations of the Hall tank. The project was begun in 2006 and will be completed in 2007. The projected expenditures in 2007 are $25,306 with a total project estimate of $275,000.

IP 120207XX KY NRW – This project is the design and construction of proposed improvements to reduce non-revenue water as part of a company-wide initiative. The project has a proposed $100,000 in 2007.

IP 12330604 SCADA Owen County – This project is for the design and construction of a SCADA system in Owen County to upgrade the existing system in Owenton and tie in other Northern Division operations. This project was begun in 2006 for a proposed $570,000 and will be completed in 2007. 2007 expenditures are proposed at $447,523.

IP 120207XX North Broadway Main Replacement – This project is for the design and construction of a replacement main from Short Street to Louden Avenue. The current main was installed in the late 1800s and is a 6-inch cast iron main. Fire flows available in the area are very limited. When maintenance is required, the valves are frequently unable to be completely shut, thus making repairs very difficult. The total project is to begin in 2007 and be completed in 2008. The proposed expenditures are $50,000 in 2007 and $2,350,000 in 2008 for a total project of $2,400,000.

12. Q. PLEASE DESCRIBE THE OPERATIONS OF KAW FACILITIES.

A. KAW operates three water treatment facilities, with two in its Central Division and one in its Northern Division. KAW has 1,857 miles of main, 25,671 valves, and 8,091 hydrants. A more detailed description of each division is given below.

CENTRAL DIVISION

The Central Division water treatment plants operate independently but are connected by KAW's distribution system. They are referred to as the Kentucky River Station ("KRS") and the Richmond Road Station ("RRS"). The KRS and RRS have a combined reliable treatment capacity of 65 million gallons per day, with the KRS at a 40 mgd capacity and the RRS at a 25 mgd capacity. KAW has received temporary re-rating of those facilities to 70 mgd in summer months and can hydraulically operate the two facilities up to 80 mgd if raw water quality is good. KAW uses a combination of these facilities to meet daily demands.

KAW withdraws water from the Kentucky River at Pool 9 just downstream of Clays Ferry, at an intake at the KRS. Raw water is pumped up a 380-foot bluff to the treatment plant and can also be transferred at the top of the cliff to the RRS. RRS can also withdraw water from Jacobson Reservoir on US 25 south of Lexington or Lake Ellerslie next to the RRS. Both of these water supplies are very small in volume.

Both of KAW's treatment facilities utilize a chemical-mechanical process. The RRS utilizes a conventional coagulation and sedimentation process, followed by filtration through granular activated carbon and sand filters. The KRS utilizes an upflow solid contact process followed by filtration through mixed media high rate filters. Both facilities utilize chloramination to maintain a residual disinfectant within the distribution system. The KAW treatment facilities are operated to meet all current and proposed federal and state water quality regulations. Each facility is fully staffed by water treatment plant operators certified by the Kentucky Division of Water.

Water treated at these two treatment facilities is pumped into the integrated distribution system that serves the Central Division. This system covers all of Fayette County and parts of Scott, Jessamine, Bourbon, Woodford, Harrison, and Clark Counties. This system is made up of 1,649 miles of main of various materials ranging from 2" to 36". The system has 8,014 hydrants. Pressures are stabilized through the use of 15 tanks with a total volume of 22.59 million gallons. From the distribution system, KAW also sells for resale water to eight other water utilities including Jessamine South Elkhorn Water District, the City of Nicholasville, the Georgetown Municipal Water and Sewer Service, the City of Versailles, the City of Midway, the City of North Middletown, East Clark County Water District and the Harrison County Water Association.

NORTHERN DIVISION

In 2001, KAW merged with Tri-Village in Owen County by acquiring its assets. This added approximately 173 miles of main in Owen, Grant and Gallatin Counties. KAW

then acquired the assets of Elk Lake and merged it with the Tri-Village. Tri-Village purchased all of its water from the City of Owenton, while Elk Lake had its own treatment facilities. The Elk Lake treatment facilities have been decommissioned and all water is now supplied through the Tri-Village distribution system. As part of the New Columbus main extension project, a connection with Georgetown Municipal Water and Sewer Service was installed on the southeastern end of Owen County and some water is purchased from that connection.

In 2005, KAW acquired the water and wastewater assets of the City of Owenton. KAW withdraws water from Severn Creek near Pool 2 of the Kentucky River through an intake facility still owned by the City of Owenton, which is currently undergoing renovations. The water is transferred to Lower Thomas Lake in Owen County, and then withdrawn from the lake to the treatment facility.

The water treatment facility utilizes a chemical-mechanical process as well, with an upflow solid contact clarifier process followed by filtration through mixed media in two separate filters. The facility currently utilizes free chlorine to maintain a residual disinfectant within the distribution system but will be able to switch to chloramination as needed. The treatment facility is operated to meet all current and proposed federal and state water quality regulations. Like its Central Division counter parts, the facility is fully staffed by certified water treatment plant operators. The facility pumps to an integrated distribution system that includes 181 miles of main in Owen, Grant and Gallatin Counties. There are 77 hydrants in the Northern Division and eleven storage tanks with a combined volume of storage of 1.78 million gallons.

13. Q. HOW LONG HAVE YOU BEEN INVOLVED WITH THE WATER SUPPLY AND TREATMENT CAPACITY DEFICIT ANALYSIS FOR KAW?

A. I first started work on it in February 1990, when I was first promoted to Planning Engineer and I have been actively involved with it ever since. As I mentioned above, KAW currently has a Certificate for Convenience and Necessity Application before the Public Service Commission regarding resolution of this issue in Case No. 2007-

00134, so I will not go into details regarding those efforts. I am confident that a resolution to this problem is in the immediate future for KAW's customers.

14. Q. DOES KAW PROPOSE AN INCREASE TO ITS TAP FEES?

A. Yes. KAW requested the addition of a tap fee in Case No. 2000-120. The tap fees were modified from the original submission, but approved for all customers in that proceeding. The tap fees at that time were based on a three-year average cost of the installation of new services. New services are installed through a contractor, who competitively bids on an annual contract for this work. KAW employees oversee the installation of all new service and meter settings. The tap fees were increased in 2004 based on increased contractor and materials pricing.

Since 2004, the cost of installing taps has significantly increased. Interestingly, the average cost for installing a 2" service has decreased over the last three years and a proposed decrease in the tap fee is included. The proposed new tap fees for are:

¾ x 5/8 " meter - $660 (increased from $510)
1" meter $1,254 (increased from $945)
2" meter $2,945 (decreased from $4,250)

15. Q. WHY HAVE THE TAP FEES CHANGED?

A. The contractor costs for the installation of new services have continued to increase, based on rising insurance costs, labor costs, and the price of gasoline. Materials costs have skyrocketed following the hurricanes of 2005 and international demands for raw materials. In addition, KAW labor costs have increased due to more stringent verification of the accuracy of work and tracking of materials. There has been a 50% increase in the number of 2" services requested annually over the last three years, which appears to have created a greater economy of scale thereby decreasing the cost of 2" services. These changes are reflected in the tap fees proposed.

Meter costs also continue to rise with the continued installation of Automated Meter Reading ("AMR"). KAW now exclusively installs AMR, and has included the full cost of an AMR meter in the tap fee.

16. Q. ARE THE TAP FEES IN THE NORTHERN DIVISION CHANGING?

A Yes. With the proposal of single tariff pricing, KAW is proposing to also go to a single tap fee for all areas. There are a very limited number of taps installed in the Northern Division, and one or two particularly difficult tap installations can significantly skew the costs unfairly for all customers.

17. Q. KAW'S LEAK DETECTION HAS BEEN DISCUSSED IN PRIOR CASES. WHAT IS ITS CURRENT STATUS?

A. KAW continues to focus on aggressive leak detection and sponsors a comprehensive program that utilizes cutting edge technology. We have begun to be recognized as an expert in leak detection, being asked to assist other water utilities and customers. Over the last five years, we have conducted 86,463 manual soundings and, using new technology called permaloggers, we have conducted an additional 120,876 mobile soundings. Unaccounted-for water continues to be a challenge despite these efforts with a 14.9 % level in 2006. Over the same time period, we have added 194 miles of main. In 2001, KAW submitted a bid to the Kentucky River Authority ("KRA") to provide leak detection services on an as-needed basis to other utilities within the Kentucky River Basin, paid for by the KRA. The Kentucky Rural Water Association had previously conducted this effort. Under those efforts, KAW successfully assisted the City of Hazard, the City of Jackson, Georgetown Municipal Water and Sewer Services, and the City of Versailles with leak detection efforts. The KRA has now gone to an as-needed program and still periodically asks KAW for assistance. Additionally, KAW continues to assist utilities that periodically contact us, including a recent trip to the City of Wilmore to assist in finding a leak near a building at Asbury College that local officials had been unable to find after two days of searching.

As part of the ongoing efforts, KAW continually reviews its program. During 2006, a trend of increasing unaccounted-for water seemed to be occurring. KAW undertook a thorough review of the program and revised it, including more aggressive system soundings. Moreover, we recently found a high service meter at the KRS to be reading incorrectly. KAW continues to look for ways to integrate improved technology into the program, including the use of permaloggers that are attached throughout the system and read every three months. These readings are much more frequent than previous sounding efforts, which may sound a zone every five years.

18. Q. WATER QUALITY CONTINUES TO BE A TOPIC OF MAJOR EMPHASIS WITH ONGOING REGULATIONS. WHAT EFFORTS HAS KAW MADE IN RECENT YEARS REGARDING WATER QUALITY?

A. The US Environmental Protection Agency ("USEPA") first established drinking water regulations in the mid 1970s. The first regulations were amended in 1986 and again in 1996. The 1996 Safe Drinking Water Act Amendments also set many new specific time deadlines for the regulation of various contaminants with phased-in schedules designed to form a seamless process from proposal to implementation. KAW continues to address new rules before they are implemented to ensure our customers continue to have excellent water quality. Raw water, plant effluent water, and the distribution system continue to be regulated under complex monitoring and reporting schemes that include total coliform bacteria, inorganic carbon, synthetic organic carbon, disinfectant residual, disinfection byproducts, radionuclides, and the corrosion byproducts lead and copper. KAW has maintained compliance with applicable requirements in these areas through attention to treatment, distribution system operation, disinfection and corrosion control.

Turbidity (a measure of light reflected by water – usually attributable to very small particles) has also been regulated in water for many years as an indicator of various contaminants, particularly microbes. More stringent regulation has developed over recent years. KAW has continued to excel at providing high quality water to its

customers, meeting all of the new and challenging regulations, as demonstrated by its progressive efforts with its Partnership for Safe Water.

KAW purchased Owenton Water Works in September 2005 and, in an effort to ensure all of our customers have the highest quality water possible, we have enrolled them in the Partnership for Safe Water as well.

19. Q. WILL KAW BE PREPARED TO MEET THE NEW REGULATIONS?

A. Yes. As a result of KAW's participation in the USEPA Partnership and the staff's ongoing operator training and instrumentation proficiency, KAW is prepared to meet the new Stage 2 Disinfection Byproduct Rule ("Stage 2 DBPs") and the new Long-Term Enhanced Surface Water Treatment Rule ("LT2").KAW

Largely attributable to KAW's conversion in 1988 to chloramines for distribution disinfection, the company seamlessly met Phase I of the disinfection byproduct regulation (effective January 2002), which reduced the THM Standard to 80 µg/L for a four quarter running average and added a new haloacetic acid (HAA) disinfection byproduct maximum contaminant limit of 60 µg/L. KAW's four-quarter running averages for THMs and for HAAs have consistently satisfied or exceeded these limits. The most recent year's running annual averages were 51/31 µg/L for THMs/HAAs. Through prudent studies and operations, both of KAW's treatment facilities have consistently met the Total Organic Carbon (TOC) removal requirements, also effective January 2002 as part of the Stage 1 Disinfectants/Disinfection Byproducts Rule. The new DBP regulations necessitate sample site evaluation after extensive evaluation of DBP occurrence throughout the distribution systems at multiple sites. This Initial Distribution System Evaluation ("IDSE"), which consists of one year of testing (or alternative approved model), was completed in 2006, including a distribution system hydraulic/water quality modeling effort to help identify worst-case scenario sites. The results of the IDSE will

determine sites to be used for future DBP compliance sampling. In addition, KAW has been optimizing plant and distribution operations in preparation for meeting the new rule.

In the Northern Division, KAW is making in-plant treatment changes and has upgraded the plant to include ammonia feed capability to ensure this regulation is met through a conversion to chloramination. While current levels at the worst-case sites meet this rule, KAW is preparing to reduce the levels even more to ensure compliance. Because the Northern Division is smaller (<10,000 people), KAW is not required to begin the compliance cycle until 2008, but we are already preparing to meet the new regulations through treatment changes, and technology improvements, including SCADA equipment at our tanks.

The LT2 regulation requires systems to monitor their raw water sources for cryptosporidium and make capital improvements based upon the detections of this organism in their raw water source. KAW's Central Division completed testing prior to the rule being released and found no cryptosporidium in any of its samples. Consequently, no capital will have to be spent as a result of this rule. In the Northern Division, KAW is already sampling even though we are not required to begin until 2008 and have found no detections to date.

Additional chemicals needed to maintain good microbial removals (turbidity performance) while maintaining organics removal and low total system DBPs, have translated into increased chemical and waste disposal costs since the prior rate request.

20. Q. HOW HAVE THESE WATER QUALITY EFFORTS IMPACTED OPERATIONS?

A. In addition to providing high quality of water to its customers, KAW has become a resource for assisting other utilities. This reputation was a large contributor to the acquisition of Tri-Village, Elk Lake, and the City of Owenton.

Tri-Village purchased all of its water from the City of Owenton, which represented about half of the water the utility produced. By 1999, the DOW had been requiring for several years that the Tri-Village and Owenton systems conduct THM monitoring and regularly issued health-based public notices for elevated THMS. Owenton was being strongly encouraged by the DOW to relocate its raw water intake, but it was struggling to keep the project moving. KAW agreed to help resolve the DBP issue as part of the purchase agreement of Tri-Village. KAW personnel began working with the treatment plant personnel in Owenton to address treatment plant changes that could reduce THM levels until the intake could be relocated. KAW assisted the City of Owenton on keeping the intake project moving forward. Further, KAW implemented operational changes for the Tri-Village distribution system.

Since September 2005, KAW has operated the Owenton Water plant and implemented water treatment process improvements and technology installations necessary to give real-time feedback of operations. By doing so, the facility has been able to continue to meet all water quality standards while still utilizing free chlorine and the Severn Creek intake while intake improvement work continues. Improvements at the water treatment plant have improved plant accuracy and worker safety, and will allow for the utilization of chloramines going forward to meet all DBP requirements. KAW continues to invest in online analyzers to provide more immediate feedback of treatment and water quality through the SCADA systems, thereby allowing operators to make treatment changes in a timely manner and reducing the potential for water quality problems. The changes made since the last rate case have continued to improve our treatment and our ability to ensure that treatment and compliance are maintained well into the future.

21. Q. WHAT OTHER ISSUES LED TO THE ACQUISITION OF THE OWENTON WATER AND WASTEWATER ASSETS?

A. Both systems were limited in resources for operations. KAW had established a Northern Division, and the merger with the City of Owenton allowed for even greater economies of scale in the operations. Both systems had been limited in infrastructure maintenance and investment, with no comprehensive planning. Neither KAW's Northern Division nor the Owenton system had SCADA in place which limited the operators' ability to detect and adjust as treatment and operational problems arose. The addition of SCADA in Owen County is anticipated to greatly enhance productivity and overall operations.

KAW upgraded processes for material purchases and changed distribution system operations to improve water quality. KAW began using its national contracts to purchase material, thus reducing costs. We retained all Owenton employees and have added a Division supervisor with extensive treatment plant supervisory experience. In cooperation with the Owen County Judge-Executive, KAW continued its program to extend new mains into currently unserved areas of Owen County while replacing infrastructure in both Owenton and Owen County. KAW is currently undertaking tank painting of both the Owenton tanks utilizing its national contracts and standards.

22. Q. ARE YOU FAMILIAR WITH KAW'S CONSERVATION PROGRAM?

A. Yes. In 1992 I was in charge of an extensive expansion of KAW's conservation program, which included a number of customer programs and community education. Over the years, it became clear that the most effective efforts were in community education. In 2001, KAW filed a Conservation Initiative Plan with the Public Service Commission, and initiated an evaluation of our conservation education programs to develop a comprehensive approach to encourage water conservation. The evaluation led to additional focus on community education in mixed delivery methods with a recognizable slogan. KAW has continued using the slogan, "Water. It's Worth Using Wisely." We have used other one-time promotions to keep the program fresh while reinforcing television, radio and print messages. The program has been

continually reinforced with customer surveys and focus groups as well as partnerships with other entities such as Bluegrass PRIDE and other organizations to promote wise water use among all consumers.

The effectiveness of the program continues to be monitored through surveys and adjusted accordingly. The success of the effort can be seen in the reduced per customer average usage as discussed in Dr. Edward Spitznagel's direct testimony. KAW continues to find the most effective component of conservation to be education and has recently updated its community education materials although the slogan is still in place. KAW plans to continue its Conservation Initiatives and periodically evaluate them for potential changes in future years.

23. Q. PLEASE EXPLAIN HOW YOUR FUEL, POWER AND CHEMICALS ARE BUDGETED.

A. All three expenses are directly related to system delivery. The basis for predicting system delivery is forecasted water sales. Non-revenue usage from historical data and unaccounted-for-water are added to sales to produce total system delivery. Total system delivery for the forecasted period is 15,271 million gallons. Monthly system delivery is projected by considering a five-year monthly history of pumpage. This projection may be adjusted based on judgment concerning future events.

Fuel and power costs are projected using historical and currently known data. Demand is projected using the most recent five-year data from the treatment facilities. Power providers are consulted regarding any known changes. Using historical data and information from Kentucky Utilities (KU), we then forecast fuel and power by multiplying the forecasted pumpage by the historical fuel demand per unit (KWH/MG), then by the current known unit costs. Any known credits or adjustments such as the environmental surcharge and fuel adjustment clause are factored into the calculations. The total fuel and power expense for the forecasted period is $2,986,277.

To project chemical expenses we generally use the most recent five-year average of pounds per million gallons per chemical that have been required. If we have been using a chemical for less than five years, or if there are changes for other reasons, we use operational judgment for our forecast, by soliciting input from our water quality associates and by relying on our operating experience. All chemicals are purchased through a competitive bidding process and current prices are in effect until December 2007. The company has forecasted a price increase effective January 2008 based on initial conversations with chemical suppliers. The chemical expense for the forecasted period is $1,505,218.

24. Q. PLEASE EXPLAIN HOW YOUR WASTE DISPOSAL IS FORECASTED.

A. For the KRS, waste disposal expense is forecasted based on the cost of the lagoon cleaning in 2006. Cleanings are amortized over a 24-month period. Other waste disposal expenses include electricity to operate sludge pumps and chemicals to treat the residuals. The forecast for waste disposal expense is $262,237. We obtained a permit-by-rule from the Division of Waste Management in August 1998 to allow us to continue to utilize our residuals from the KRS and the RRS on-site for an additional 10-20 years.

For the RRS, the budget is the forecast for the actual operations of the sludge press facilities including labor, chemicals, and electricity and is included as an ongoing expense. We have deferred the cost for periodic removal of residuals from the Lake Ellerslie discharge area and the amortized cost is included in the budget.

25. Q. HOW DOES THE WATE DISPOSAL PROCESS AT EACH PLANT OPERATE?

A. The process is slightly different for the two facilities. KAW utilizes a lagoon de-watering process at the KRS. Backwash flows by gravity into two separator tanks. The heavy residuals concentrate and settle to the bottom of the tanks and are then pumped into four de-watering lagoons. The supernatant water from the separator tanks is pumped through a dechlorinating system and then discharged under a

KYPDES permit back into the Kentucky River. The concentrated residuals that have been pumped into the lagoons are further de-watered in the lagoons. The clarified water is removed from the lagoons and discharged into the Kentucky River. Every two years the concentrated residuals are removed and beneficially used on-site.

At the RRS the residuals flow into two thickening tanks. The clarified water is removed and discharged under the guidelines of a KYPDES permit into Lake Ellerslie. The residuals are processed by a belt sludge press. The decant water from the belt press is discharged into the LFUCG wastewater system. The de-watered residuals are then beneficially reused on the KAWC property.

26. Q. HOW HAS THE PROCESS OF STORING RESIDUALS ON SITE BENEFITED KAW?

A. Many water facilities around the country have significant costs associated with hauling solids from the plant site to a permitted landfill. Kentucky American Water has achieved a significant cost savings by the beneficial reuse of these residuals on its property.

27. Q. PLEASE EXPLAIN HOW MAINTENACE EXPENSES ARE FORECASTED.

A. Maintenance expense is forecasted based on historical trends and costs. Some maintenance programs are established in The American System Operations Manual. $1,309,647 was expended for maintenance during the base period and $1,507,210 is projected for the forecasted period. These programs include items such as valve operation, hydrant inspections, hydrant flow testing, flushing dead end mains, maintenance of equipment at treatment plants, and maintenance of building and grounds.

28. Q. HOW ARE DEFERRED MAINTENANCE COSTS BUDGETED?

A. Appropriate deferred maintenance items are determined annually by each department. The Engineering group specifically is responsible for developing tank maintenance

schedules and cost estimates. Network and Production departments provide projects as appropriate. The Finance department then determines the appropriate length of amortization and budgets accordingly. In the forecasted period there are three new deferred maintenance projects which are tank paintings in Owen County in 2007 and 2008. The forecast includes $1,601,682 of deferred maintenance expenses.

29. Q. WHAT HAS KAW DONE TO CONTROL COSTS OF OPERATIONS?

A. Each year an annual operation and maintenance plan is developed for each particular operating area. Our plan utilizes a zero based budget approach, which relies on historical elements and looks at ways to provide maximum value to our customers through the use of technology and productivity improvement. Each business unit manager, or department head, is responsible for controlling costs within the guidelines of the annual plan. Specific expenditures are reviewed on a monthly basis (or more often) to ensure that the company is not only addressing current operating conditions, but just as importantly, is maintaining each department's budget as planned. Each month, plans are reviewed relative to current operating conditions and appropriate forecasts are developed for the remainder of the year for any expected changes in expenses or revenues. Additionally, we have empowered all associates to work with ideas in cost control.

30. Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

EXHIBIT 1

RECURRING PROJECTS
FOR STRATEGIC CAPITAL EXPENDITURE PLANS

New Identifier	Recurring Project Investment Plan Item	Former Identifier 2004-2006	Former Identifier 1999-2003	Former Identifier thru 1999
DV	Developer/Governmental Contributions	80	A	1A3
A	Network - Extension	82	B	1A2
B	Network - Replacement/Restored	81	B	1A5
C	Network - Unscheduled Repair	81	B	1A5
D	Network - Relocation requested by others	81	B	1A5
E	Hydrants - New	84	B	1A2
F	Hydrants - Replacement	83	B	1A5
G	Services - New	86	C	1B
H	Services - Replacement	85	C	1B
I	Meters - New	88	D	1C
J	Meters - Replacement	87	D	1C
K	ITS Equipment & Systems	89	E	2
L	SCADA Equipment and Systems	89	E	2
M	Security Equipment and Systems	90	E, H	2
N	Offices and Operations Centers	90	E, H	2
O	Vehicles	91	F	3
P	Tools and Equipment	92	G	4
Q	Process Plant - Replacements, Additions, Treatment Media Replacement	93, 94, 95	G, H	4, 5
R	Tank Rehabilitation/Painting (if capitalized)	96		
S	Comprehensive Planning Studies (if capitalized)	97		