EXCEL
ENGINEERING CONSULTANTS, INC.
Environmental & Civil Engineers

Before the

FLORIDA PUBLIC SERVICES COMMISSION

DOCKET NO. 010492-WS

APPLICATION FOR A GENERAL RATE INCREASE FOR

[illegible]

[illegible]

DIRECT TESTIMONY OF

JULIAN COTO, P.E.
GARY MORSE
CHARLES K. LEWIS

Prepared by:
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Zellwood Station
Water and Wastewater Treatment Facility
Orange County, Florida
Docket No. 010492-WS

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DIRECT TESTIMONY OF JULIAN COTO

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ON BEHALF OF

ZELLWOOD STATION UTILITIES

DOCKET NO. 010492-WS

INTRODUCTION

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

A. *My name is Julian Coto. My business address is 122 Wilshire Boulevard, Casselberry, Florida 32707.*

Q. ***BY WHOM ARE YOU EMPLOYED?***

A. *I am the president and principal engineer of Excel Engineering Consultants, Inc.*

Q. ***WHAT IS YOUR OCCUPATION?***

A. *I am a professional engineer.*

Q. ***PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND.***

A. *My educational experience includes a Bachelor of Science in Civil Engineering; Post Graduate studies in Environmental Engineering; Master's in Business Administration.*

Q. ***PLEASE GIVE A SUMMARY OF YOUR WORK EXPERIENCE.***

A. *I have a total of 22 years of engineering experience after receiving my BSCE. I started Excel Engineering Consultants, Inc. in 1992 and have served as Principal Engineer over the past 9 years. I have 13 years of previous experience working for various engineering consulting firms. My experience includes design, permitting, construction and operations of water and wastewater facilities. My water and wastewater experience since graduation until 1992 was predominantly on municipal projects for various cities, counties and federal agencies. Since starting Excel Engineering Consultants I have been involved, predominantly, with the private sector. We provide water and wastewater utility engineering services to a number of publicly and privately owned mobile home park operators. In this capacity we provide these clients with expertise in the planning, design, permitting, construction, operations and rate design .*

Q. ***WHAT ARE YOUR RESPONSIBILITIES AS A PROFESSIONAL ENGINEERING CONSULTANT?***

A. *As a Professional Engineering Consultant I assist clients in planning, design, permitting, construction, operations, management and rate design of water and wastewater utilities.*

Q. ***TO WHAT TRADE AND/OR PROFESSIONAL ORGANIZATIONS DO YOU BELONG?***

A. *I am a member of the American Water Works Association, the Florida Waterworks Association, Florida Environment Federation, the American Academy of Environmental Engineers, the Florida Engineering Society and the Florida Rural Water Association.*

Q. ***HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION?***

A. *Yes. I have submitted testimony and/or testified before the Florida Public Service Commission in the last docket involving the certificate application.*

PURPOSE OF TESTIMONY AND EXHIBITS

Q. ***WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?***

A. *I will testify regarding Zellwood Stations ("Zellwood") original cost study (in part) and the pro forma test year adjustments proposed for the water and wastewater systems. I will also sponsor the additional engineering information contained in Volume 2:*

Q. ***WERE THESE DOCUMENTS PREPARED BY YOU OR UNDER YOUR SUPERVISION?***

A. *Yes, they were.*

Q. *WHAT TEST YEAR HAS BEEN USED AS A BASIS FOR DETERMINING COSTS IN THIS FILING?*

A. *Actual twelve months ended December 31, 2000 was used as the historical test period adjusted for certain pro forma adjustments reflecting known changes to the costs of providing service.*

Q. *PLEASE EXPLAIN YOUR INVOLVEMENT IN THE DEVELOPMENT OF THE ORIGINAL COST STUDY.*

A. *Zellwood Station CO-OP, Inc. was required as part of the initial filing to perform an original cost study for the water and wastewater systems as outlined in the last case before this Commission in Docket No. 980307-WS. Excel Engineering Inc. was instrumental in preparing the initial system inventory and providing engineer's opinion of costs for the plant inventory using today's current costs. I will offer testimony as to the exact approach used to develop the replacement cost.*

Q. *PLEASE EXPLAIN THE APPROACH USED BY YOU TO PERFORM THE INVENTORY OF THE WATER AND WASTEWATER SYSTEMS ASSETS?*

A. *The available plans and engineering information for the water and wastewater systems were reviewed. A site visit was completed to document number of manholes, valves, fire hydrants and lift stations and to observe the readily visible portions of the facilities. The water treatment plant and the wastewater treatment plants were observed. Excel has worked on the water and wastewater systems since 1996. The FDEP wastewater treatment facility Operating Permit and the SJRWMD Consumptive Use Permit were obtained by Excel. Therefore we are familiar with the utilities water, supply, treatment, and pumping facilities, as well as, the wastewater treatment and disposal facilities. We interviewed the*

utilities director and property manager regarding confirmation and location of pipes and pipe sizes.

Q. ***DID YOU SUMMARIZE THE WATER AND SEWER SYSTEM ASSETS IN TABULAR FORM?***

A. *Yes. A summary of the assets is contained in Section 14 of Volume 2 of the rate filing.*

Q. ***DID YOU INVENTORY THE WATER METERS FOR THE ORIGINAL COST STUDY.***

A. *No. Zellwood Station has a meter inventory for all meters installed by them since 1996 up to the present. The inventory includes lot number, meter size, date installed, cost of meter, cost of other materials, and labor cost to install the meter. I relied upon this meter inventory data in the development of the original cost study. A copy of this inventory has been included in Section 14 of Volume 2 – Additional Engineering Information.*

Q. ***WHAT INFORMATION DID YOU RELY UPON TO DETERMINE THE REPLACEMENT COST FOR EACH UNIT OF PROPERTY?***

A. *The replacement cost of the water and wastewater system components were determined by using recent contractor bids for similar types of components and by using published information from "Building Construction Cost Data", by R. S. Means, "Marshall's Valuation Service" by Marshall and Swift and interviews with Wayne's Diversified Services (Contractor).*

Q. ***DID YOU ESTIMATE THE ORIGINAL COST OF THE SYSTEM ASSETS?***

A. *No. I was responsible for the system inventory and estimating the replacement cost of the various components. The replacement cost information was analyzed and utilized by Mr. Morse who was responsible for determining the original cost of the assets.*

Q. ***WOULD YOU BRIEFLY EXPLAIN THE TYPE OF WATER TREATMENT FACILITY LOCATED IN ZELLWOOD STATION?***

A. *Raw water is supplied by two deep wells which tap into the Floridan Aquifer. Each well has a casing with a diameter of 12 inches. Each well is equipped with a 50 Hp vertical turbine pump. Each well pump is capable of delivering approximately 1,000 gpm. The raw water is pumped to a tray aerator which is located on top of a 150,000 gallon ground level concrete water storage tank. The raw water is aerated to remove hydrogen sulfide that naturally occurs in the water from the Floridan Aquifer. The water is disinfected in this storage tank. Chlorine is used for disinfection of the raw water. The finished water is pumped from the ground storage to a 15,000 steel hydropneumatic tank which in turn is connected to the potable water distribution system. Finished water is pumped into the hydropneumatic tank be a series of high service pumps with a total rated capacity of 2,340 GPM. The 15,000 gallon hydropneumatic tank maintains distribution system pressure.*

Q. ***IS FIRE PROTECTION PROVIDED TO THE CUSTOMERS OF ZELLWOOD STATION?***

A. *Yes. There are approximately 60 fire hydrants located through out the water distribution system. A listing of the fire hydrants along with their location is contained in Schedule E-6 of the MFR's. The water distribution system is*

comprised of 12 inch diameter mains which reduce down to 6 inch diameter for the provision of fire flow.

Q. ***WHAT IS THE REQUIREMENT TO PROVIDE FIRE PROTECTION IN ZELLWOOD STATION?***

A. *During the 1970's when Zellwood Station was being developed, Orange County's Land Development Code required a minimum of 500 GPM of fire pumping capacity for residential communities.*

Q. ***DOES ZELLWOOD STATION MEET THIS REQUIREMENT?***

A. *Yes.*

Q. ***DOES THE WATER PLANT HAVE A PERMIT ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION?***

A. *Yes. PWS 3481506 was issued on July 8, 1974. The permitted capacity of the Water Treatment Facility is 1.25 gpd (based on the maximum day demand)*

Q. ***DOES ZELLWOOD STATION HAVE A CONSUMPTIVE USE PERMIT FOR THE WATER SUPPLY WELLS?***

A. *Yes. Consumptive Use Permit No. 2-095-0231NRM2 was issued on August 12, 1997. The permit states that the maximum withdrawals from the existing wells is 672,219 gallons per day.*

Q. ***ARE THERE ANY SPECIFIC CONDITIONS OR REQUIREMENTS OF THE CONSUMPTIVE USE PERMIT?***

A. *The Consumptive Use Permit required the utility to submit a Reuse Feasibility Report, to implement a water conservation plan and to reduce its water consumption among others. Please refer to Section 10, Volume 2 to review a copy of the Consumptive Use Permit.*

Q. ***IS THERE A COPY OF THE WATER SYSTEM PERMITS CONTAINED IN THE RATE FILING?***

A. *Yes. A copy of the Public Water System permit and the Consumptive Use Permit is included in Section 10 of Volume 2.*

Q. ***WOULD YOU EXPLAIN THE TYPE OF WASTEWATER TREATMENT FACILITY AT ZELLWOOD STATION?***

A. *The existing wastewater treatment facility is a Class C, Category III extended aeration activated sludge wastewater treatment facility with a rated capacity of 300,000 gallons per day based on annual average daily flow. The facility has a current operating permit, Permit No. DO48-202737, which expires on June 6, 2002. The facility utilizes a two cell rapid infiltration basin for effluent disposal. The wastewater residuals are transferred to an aerobic digester for thickening and then transported to an off-site location for lime stabilization and ultimate disposal*

Q. ***ARE THERE ANY SPECIFIC REQUIREMENTS OF THE WASTEWATER PERMIT THAT YOU WISH TO DISCUSS?***

A. *There are no extraordinary issues with the current FDEP WWTF Operating Permit. The facility is required to comply with a number of requirements which are typical and part of ordinary operations and maintenance of any facility of this type and size.*

Q. ***HAVE YOU PERFORMED A REUSE FEASIBILITY STUDY?***

A. *Yes. A Reuse Feasibility Study was performed in accordance with Specific Condition No. 32 of the Consumptive Use Permit. It should be noted that pursuant to 62-610, FAC, the facilities dual cell rapid infiltration basin meets the definition of Reuse. However, the St. Johns River Water Management District*

(SJRWMD) does not consider the disposal of effluent in this manner to be Reuse. The SJRWMD does not consider this method of effluent disposal to provide a significant beneficial use in the protection of the Floridan Aquifer. The SJRWMD defines Reuse as that which minimizes groundwater withdrawal from the Aquifer. Therefore, the SJRWMD seeks to reuse effluent from wastewater treatment facilities with permitted capacities greater than 100,000 gpd. The effluent is reused for irrigation purposes which thereby conserves water withdrawal from the Aquifer. Zellwood irrigates its golf course with a 12 inch diameter and a 6 inch diameter deep wells. Therefore, Zellwood has an opportunity to achieve this goal.

A Reuse Feasibility Report was completed on April 23, 2001 and submitted to the SJRWMD in accordance with the requirement of the CUP. A copy of the report is contained in Section 15 of Volume 2 of the rate filing.

Q. *WHAT WERE THE RESULTS OF THE REUSE FEASIBILITY STUDY?*

A. *Since the facility's permitted capacity is greater than 100,000 gpd the facility meets the minimum size requirement for public access spray irrigation. The facility has a permitted capacity of 300,000 gpd. The WWTF generates an annual average daily flow of approximately 173,000 gpd. Minimum flows of approximately 146,000 gpd is experienced during the summer months. In order to provide Reuse for public access spray irrigation of the golf course the facility needs to be upgraded to a Class 1 Reliability plant in accordance with 62-610, FAC. In order to accomplish this the facility needs to be a dual train facility with high level disinfection and accommodate various storage requirements.*

The engineer's opinion of costs for upgrading the existing facility to meet this requirement is approximately $1.15 million. It is expected that the construction

of the facility can be completed by December 31, 2002.

Q. IN ADDITION TO THE $1.15 MILLION CAPITAL COST FOR THE REUSE FACILITY, WILL OPERATING COSTS CHANGE MATERIALLY?

A. Yes. Currently, the facility requires a licensed operator with a minimum Class C certification to be on-site three (3) hours per day for five (5) days per week and one (1) visit each weekend, as a minimum. Once the reuse plant is placed in service, the operator requirements will change. Chapter 62-610, FAC requires operator attendance, for a Class 1 reliability reuse facility, to be six (6) hours per day, seven (7) days per week. Additional monitoring and sampling costs will be incurred. Power and chemical costs will increase as well.

Q. HAVE YOU MADE AN ESTIMATE OF THE ANNUAL COSTS TO OPERATE THE REUSE FACILITY?

A. Yes. The engineer's opinion of costs to operate the reuse plant is expected to be approximately $193,200 annually as stated in Section 5.0 of the Reuse Feasibility Report. This represents an increase of $58,640.00 over the test year operating costs. Refer to Schedule B-6a page 1 of 1 column 3.

Q. ARE YOU PROPOSING SEVERAL OTHER PRO FORMA ADJUSTMENTS RELATED TO THE UTILITY SYSTEMS?

A. Yes. Several pro forma adjustments are being recommended as contained in the MFRs.

Q. PLEASE EXPLAIN EACH OF THE PRO FORMA ADJUSTMENTS YOU ARE PROPOSING AND EXPLAIN THE NEED FOR EACH ADJUSTMENT.

A. A number of pro-forma adjustments are being requested for work which is necessary in order to replace old systems or extend the life of existing systems. These pro-forma adjustments are as follows:

1. *Sanitary Sewer Collection System - Inspection and Repair*

Some parts of the sanitary sewer collection system are over 25 years old. The collection system has never been inspected in order to determine its condition. It is typical and common practice to periodically inspect sanitary sewage collection systems in order to document its condition and schedule repairs. In the case of Zellwood this exercise is overdue. In order to provide adequate planing for the utility system it is necessary to know the condition of its systems. The investigation will document the condition of the collection system thereby enabling planing and budgeting of repairs of discovered deficiencies. It is expected that the inspection will include an inflow/infiltration study, smoke testing, and televising. Subsequently, deficient areas can be identified and repairs can be planned and budgeted.

2. *Water Distribution System - Inspection and Repair*

Some parts of the water distribution system are over 25 years old. There are a number of valves that are old and in poor condition and need to be replaced. A few areas may need to have additional valves installed to provide better control. A leakage analysis needs to be completed in order to determine areas in the distribution system that need to be repaired. This is one of the requirements for water conservation. These are required to minimize "unaccounted for water".

3. *Water Treatment Facility - Inspection and Repair of Water Storage Tanks.*

The 150,000 ground level concrete water storage tank is approximately is over 15 years old. The tank needs to be inspected and repaired periodically in order to extend the useful life of the tank and prevent catastrophic tank failure. The 15,000 gallon hydropneumatic tank is over 25 years old. This tank is scheduled to be replaced along with some of the plant piping and the master water meter.

Subsequently, the tanks need to be inspected every 5 years and repairs made as necessary to extend its useful life and aid in planing major repairs and replacements.

4. *Water Supply Wells - Inspection of Wells and Pumps*

The water supply wells and pumps need to be inspected periodically in order to determine its condition and plan and budget repairs and/or replacements. These wells were constructed in the 1940's. One well pumps is approximately 3 years old and the other one is approximately 27 years old. Each well pump should be pulled and inspected and the well should be televised every 5 years in order to determine its condition and implement proper planing and budgeting.

5. *Lift Station Maintenance and Repair*

Zellwood Station has five (5) lift stations. The pumps need to be pulled and inspected and the lift stations cleaned and inspected. Lift station pumps should be pulled, cleaned, degreased and inspected every 3 months. Any repairs to the pumps, the guiderail systems, floats, or hardware should be completed at that time or planned and budgeted at a future time.

6. *Water Meter Replacement*

Zellwood has approximately 200 water meters that are approximately 10 years old and need to be replaced. These are a group of water meters that were installed on or about 1984. These meters will be replaced over a two year period.

Q. *DOES THIS CONCLUDE YOUR TESTIMONY?*

A. *Yes it does.*

DIRECT TESTIMONY OF GARY MORSE

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ON BEHALF OF

ZELLWOOD STATION UTILITIES

DOCKET NO. 010492-WS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Gary Morse. My business address is 131 Harrogate Court, Longwood, Florida 32779.

Q. BY WHOM ARE YOU EMPLOYED?

A. I am self employed .

Q. WHAT IS YOUR OCCUPATION?

A. I am a Utility Consultant.

Q. PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND.

A. My educational experience includes an Associate's Degree in Civil Technology from Delhi College in 1972. In 1974, I received a Bachelors Degree from the University of Central Florida in the field of Environmental Engineering. In addition, I have attended a number of utility rate making, cost of service, rate design, and return on investment seminars sponsored by various professional associations, universities, and state regulatory agencies.

Q. PLEASE GIVE A SUMMARY OF YOUR WORK EXPERIENCE.

A. Over the past 27 years, I have held various positions in the water and wastewater industry. Upon graduation in 1974, I worked for five years for the engineering department of the Florida Public Service Commission performing rate case related assignments. In 1979, I was employed by Reynolds, Smith, and Hill Inc. consulting engineers where I was responsible for water, wastewater, and electric rate studies for municipal clients. In 1981, I was employed by R.W. Beck and

Associates, Inc. as a rate consultant performing rate related work for water, wastewater and electric utility clients. In 1985, I was a partner in a small utility consulting firm that specialized in utility rate and acquisition work for utility clients. In 1991, I was employed by Florida Water Services, Inc. as a utility rate specialist. During my tenure at Florida Water, I was involved in several large rate filings before the Florida Public Service Commission. In 1996, I became self employed as a utility rate consultant performing water and wastewater cost of service studies and utility acquisition studies.

Q. WHAT ARE YOUR RESPONSIBILITIES AS A UTILITY CONSULTANT?

A. As a Utility Consultant I have been responsible for providing professional consulting and sub-consulting services to private and public water and wastewater utilities relating to cost of service studies, development of user rates and impact fees, preparation of utility budgets, preparation of bond feasibility reports and revenue requirement studies.

Q. TO WHAT TRADE AND/OR PROFESSIONAL ORGANIZATIONS DO YOU BELONG?

A. I am a member of the American Water Works Association and the Florida Waterworks Association.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION?

A. Yes. I have submitted testimony and/or testified before the Florida Public Service Commission on several occasions.

PURPOSE OF TESTIMONY AND EXHIBITS

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. I will testify regarding Zellwood Stations ("Zellwood") original cost study (in part) and the "used and useful" analysis for the water and wastewater systems and I will sponsor the following documents filed with the original application in the case:

MFR "F" Schedules contained in Volume I

Original Cost Study contained in Volume II

Q. WERE THESE DOCUMENTS PREPARED BY YOU OR UNDER YOUR SUPERVISION?

A. Yes, they were.

Q. WHAT TEST YEAR HAS BEEN USED AS A BASIS FOR DETERMINING COSTS IN THIS FILING?

A. Actual twelve months ended December 31, 2000 was used as the historical test period adjusted for certain pro forma adjustments reflecting known changes to the costs of providing service.

Q. PLEASE EXPLAIN YOUR INVOLVEMENT IN THE DEVELOPMENT OF THE ORIGINAL COST STUDY.

A. Zellwood Station CO-OP, Inc. was required as part of the instant filing to perform an original cost study for the water and wastewater systems as outlined in the last case before this Commission in Docket No. 980307-WS. Excel Engineering Inc. was instrumental in preparing the initial system inventory and "costing out" of the

plant inventory using todays current costs, or the replacement cost of the assets. Mr. Coto will testify as to the exact approach used to develop the replacement cost. Once that phase of the project was completed, I took that data and "trended" the replacement cost back to the estimated original cost at the time the assets were first dedicated to providing service to the customers of Zellwood Station.

Q. COULD YOU EXPLAIN THE APPROACH USED BY YOU TO DETERMINE THE ORIGINAL COSTS FOR THE WATER AND WASTEWATER SYSTEMS?

A. Yes. Mr. Coto provided me with a set of tables summarizing the treatment plant assets and the water distribution/wastewater collection system assets for each of the specific areas within the Zellwood Station community. This was done in an effort to identify mainly water lines and wastewater lines by vintage year of installation. Those tables are included as part of the original cost study and are included in Volume II . The original cost was developed with the use of Handy Whitman Construction Cost Indices. Index numbers were selected for each particular NARUC account for the South Atlantic Region. Index values were selected for July 2000 (the mid-point for the test year) and the estimated original installation date for each asset. This information is summarized on tables included in Volume I - MFR Schedule A-2, pages 1 of 2 and 2 of 2. Page 1 of 2 summarizes the water system original cost and page 2 of 2 summarizes the wastewater system original cost.

Q. PLEASE EXPLAIN HOW YOU TREATED WATER METERS THAT WERE INSTALLED BY THE PRIOR OWNER IN THE ORIGINAL COST STUDY.

A. Approximately 175 water meters were installed by the prior owner of the water system. These were scattered throughout the service area and in determining their original date of installation I assumed that these meters were installed based on the ratio of the service laterals installation dates for the various areas. Additionally, I assumed a replacement cost $162.46 per meter representing the actual average cost of a new meter installed by Zellwood Station according to the meter inventory records. The original cost of these meters is treated as CIAC in the determination of rate base.

Q. PLEASE EXPLAIN HOW YOU TREATED THE BALANCE OF THE WATER METERS FOR THE ORIGINAL COST STUDY.

A. Zellwood Station has kept a meter inventory for all meters installed by them since 1996 up to the present. The inventory includes lot number, meter size, date installed, cost of meter, cost of other materials, and labor cost to install the meter. I relied upon this original cost data in the development of the original cost study. A copy of this inventory has been included in Volume II – Additional Engineering Information.

Q. HOW WERE THE WATER LINES AND WASTEWATER LINES TREATED IN RATE BASE?

A. These lines were installed by the original developer and should be treated as CIAC. I believe that is how Mr. Lewis treated them in determining rate base.

Q. WOULD YOU EXPLAIN WHAT DEPECIATION RATES YOU USED IN THE DEVELOPMENT OF THE ORIGINAL COST STUDY?

A. Yes. This utility system is classified as a Class B system based on the level of gross revenues collected during the test year. Therefore, in developing the accumulated depreciation for the original cost study, I used the average service lives for large Class A & B utility systems contained in the FPSC rules 25-30.140 and used the composite lives where appropriate.

Q. WERE YOU RESPONSIBLE FOR THE PREPARATION OF THE ENGINEERING "F" SCHEDULES?

A. Yes I prepared Schedules F-1 through F-10 of the MFRs.

Q. PLEASE EXPLAIN WHAT INFORMATION YOU RELIED UPON IN PREPARING THESE SCHEDULES.

A. I relied upon utility plant flow data recorded on the monthly operating reports (MORs) submitted to the Florida Department of Environmental Protection. A copy of the water and wastewater plant MORs is contained in Volume II – Additional Engineering information for the test year and the year prior to the test year. I also relied on the operating permits in determining the permitted capacity of the plants.

Q. DID YOU PERFORM A "USED AND USEFUL" ANALYSIS THAT IS INCLUDED IN THE "F" SCHEDULES?

A. Yes. Schedule F-5, page 2 of 2, shows the water plant used and useful calculations based on the methods recommended by the Commission staff. Line 14 shows the proposed used and useful amount of 90% for the water plant

including a five-year margin reserve. Schedule F-6, page 2 of 2 shows the wastewater plant used and useful calculations based on the methods recommended by the Commission staff. Line 14 indicates a used and useful amount of 65% for the wastewater plant including the five-year margin reserve. Schedule F-7, page 2 of 2, shows the water distribution and wastewater collection system used and useful calculations based on the methods recommended by the Commission staff. Line 6 indicates that the water distribution/wastewater collection system is 91% used and useful including the five year margin reserve.

Q. HOW DO YOU PROPOSED TO TREAT THE NEW REUSE FACILITY INVESTMENT FOR RATE BASE?

A. I propose to include the entire cost of the reuse facility in rate base as 100% used and useful. Mr. Julian Coto will address the design of the facility, the construction schedule, and the requirements to construct the reuse plant in his direct testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

DIRECT TESTIMONY OF CHARLES K. LEWIS

BEFORE THE CITRUS COUNTY UTILITY AUTHORITY

ON BEHALF OF

THE FLORIDA PUBLIC SERVIXCE COMMISSION

DOCKET NO. 010492-WS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Charles K. Lewis. My business address is 20 North Main Street, Room 461, Brooksville, Florida 34601.

Q. BY WHOM ARE YOU EMPLOYED?

A. I am employed by Hernando County Government.

Q. WHAT IS YOUR POSITION WITH HERNANDO COUNTY?

A. I am Director of Regulatory and franchise Administration/Property Management.

Q. PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND.

A. My educational experience includes an Associate's Degree in Accounting from Jackson Community College in 1972. In 1975, I received a Bachelors Degree from Michigan State University in the field of Economics/Political Science. In 1978 I received a Masters in Political Science from Michigan State University. In addition, I have attended a number of utility rate making, cost of service, rate design, and return on investment seminars sponsored by various professional associations, universities, and accounting firms.

1999 Hernando County Government employed me as Director of Regulatory and Franchise Administration.

Q. WHAT ARE YOUR RESPONSIBILITIES AS DIRECTOR OF REGULATORY AND FRANCHISE ADMINISTRATION WITH HERNANDO COUNTY?

A. I'm responsible for the regulating all aspects of the investor owned water, wastewater, cable television and residential solid waste operations within Hernando County. This includes monitoring customer service complaints, operating and capital budgets, field operations as well as reviewing financial and rate information. In addition, the position requires professional, administrative and technical skills and abilities developing, implementing, administering and regulating water and/or wastewater utility applications, utility extensions, and rate adjustments required by privately owned utilities.

Q. TO WHAT TRADE AND/OR PROFESSIONAL ORGANIZATIONS DO YOU BELONG?

A. I am a member of the American Water Works Association, the Florida Waterworks Association and I'm on the Rates and Revenue subcommittee of the National Association of Water Companies.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE A PUBLIC UTILITIES COMMISSION?

A. Yes, I have submitted testimony and/or testified before the Michigan Public Service Commission, the Connecticut Department of Utility Control, the Massachusetts Public Service Commission, the Indiana Utility Regulatory Commission as well as numerous county commissions within the State of Florida.

PURPOSE OF TESTIMONY AND EXHIBITS

Q. PLEASE OUTLINE THE SCOPE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I will testify with respect to Zellwood Station Co-op, Inc. Cost of Service and sponsor the following documents filed in this case: Volume I – Water and Wastewater Minimum Filing Requirements (Schedules - A Rate Base, Schedule - B Operating Income, Schedule - C Income Taxes, Schedule - D Cost of Capital and Schedule - E Rates and Rate Design

Q. WERE THESE DOCUMENTS PRERPARED BY YOU OR UNDER YOUR SUPERVISION?

A. Yes, they were.

Q. WHAT TEST YEAR HAS BEEN USED AS A BASIS FOR DETERMINING COSTS IN THIS FILING?

A. Zellwood requested and the Commission approved the use of a historical test year ending December 31, 2000. The proposed final rates are based on actual 2000 costs adjusted for certain pro forma adjustments reflecting known and certain events.

Q. Zellwood is proposing an overall increase of $61,673 in sales revenues or a 11.96% increase as shown on Schedules B-1 and B-2. The proposed decrease for water is ($44,159) or (17.3%) and wastewater increased $105,832 or 40.59%, respectively. The overall revenue requirement of the Zellwood water and wastewater systems filed in this case is $577,223.

Q. WOULD YOU GENERALLY DISCRIBE THE DEVELOPMENT OF RATE BASE IN THIS FILING?

A. Zellwood developed rate base information according to the Commission's MFR's. The amounts shown for rate base are average balances based on a simple of the beginning and ending test year balances (see Schedules A-5, 6, 9 & 10). Working capital was determined according to Commission precedent using 1/8 of

Operation and Maintenance ("O&M") expense methodology as shown on Schedule A-17, page 1 of 1.

Q. WHAT IS THE TOTAL RATE BASE REQUESTED IN THIS FILING?

A. Water rate base is $195,987 and wastewater rate base is $634,521.

Q. HAS ZELLWOOD MADE ANY ADJUSTMENTS TO WATER AND WASTEWATER RATE BASE FOR PURPOSES OF FINAL RATES?

A. Yes, it has. Pro forma adjustments have been made which increases water rate base by $32,500 and increases wastewater rate base by $603,650. These adjustments are summarized on Schedule A-3, page 1 of 1.

Q. WOULD YOU PLEASE DESCRIBE THESE ADJUSTMENTS?

A. Yes, I will.

Water plant in service was increased by $32,500 in account 320 for (1). a new hydro pneumatic storage tank and (2) meter replacement in account 334.

Wastewater plant in service was increased by $603,650 for (1). TV/refurbish sewer lines in account 360, (2) Reuse force main, also account 360, (3) Reuse pump station, account 371 and (4) Reuse

treatment plant, account 380. In order to develop a test year average balance pro forma plant additions were divided by 2.

Q. HOW WERE THE WATER AND WASTEWATER PLANT BALANCES DEVELOPED?

A. In Order No. PSC-98-1572-FOF-WS issued on November 23, 1998 the Commission ordered Zellwood to develop a original cost study for both water and wastewater gross plant in service and accumulated depreciation. The Commission is concerned that the plant records were lost during the transfer of ownership from the previous owner to Zellwood. I have ignored the existing booked plant and accumulated depreciation numbers and used the numbers that Mr. Gary Morse has developed in his original cost study. Mr. Morse explains how he developed the original cost study in his direct testimony.

Q. HOW WERE THE WATER AND WASTEWATER CIAC BALANCES DEVELOPED?

A. As I previously stated the books and records of the utility were lost during the sale of the utility to Zellwood, therefore I have incorporated in the water and wastewater CIAC/CIAC amortization accounts (SEE schedule A-12) the balances from the following NARUC accounts 331, 333, 334 (meters installed by previous

owner), 335, 360, 361 and 363. In addition, I used the cash CIAC balances that's reflected in the utility's general ledger. These balances reflect the Commission approved service availability fees authored in Docket No. 980307-WS.

Q. WERE THERE ANY NON-USED & USEFUL ADJUSTMENTS MADE TO WATER AND WASTEWATER RATE BASE?

A. Schedules A-5, 6, 9 & 10 calculate the non-used & useful water and wastewater gross plant and accumulated depreciation adjustments. Non-used & useful water plant is ($156,065), non-used & useful wastewater plant is ($374,241), non-used & useful water accumulated depreciation is $66,674 and wastewater is $263,198. Mr. Gary Morse developed the non-used & useful allocations and explains his methodology in his direct testimony.

Q. WOULD YOU GENERALLY DESCRIBE THE DEVELOPMENT OF INCOME IN THIS FILING?

A. I have developed income information according to the MFR's. The detailed development of water income is shown on Schedule B-1 and the development of wastewater income is shown on Schedule B-2.

Q. WHAT IS THE TOTAL NET OPERATING INCOME REQUESTRED IN THIS FILING?

A. The total net operating income under present rates is $42,172 for water and ($101,070) for wastewater. Zellwood is requesting zero NET operating income for both water and wastewater.

Q. WHY IS ZELLWOOD REQUESTING ZERO NET OPERATING INCOME IN THIS FILING?

A. The Zellwood water and wastewater utility is a non-for profit utility with zero common equity in the capital structure (see Schedule D-1). Zellwood's water and wastewater revenue requirements include operations and maintenance expense, depreciation expense net of CIAC amortization, taxes other than income taxes (regulatory assessment fees and payroll taxes) and interest expense (rate base (x) the overall rate of return).

Q. HAS ZELLWOOD MADE ANY ADJUSTMENTS TO PER BOOK INCOME FOR RATEMAKING PURPOSES?

A. Yes, we have. Zellwood has made pro forma adjustments to water and wastewater revenue and expenses as shown on Schedule B-3 page 1 and 2 of 2. The net effect of the pro forma adjustments on revenues and expenses is an increase of present income for water of $27,082 and a reduction of present income for wastewater of ($64,549) or a net decrease to present income of ($37,467).

than income taxes. The second wastewater adjustment is a pro forma adjustment of $60,400 for increased operator staffing at the new reuse wastewater treatment plant. The third wastewater adjustment reflects a decrease of ($4,775) in sludge removal expense due to reuse plant efficiency. The fourth wastewater adjustment reflects an increase of $10,465 in electric power costs due to increased power usage at the new reuse wastewater treatment plant. The fifth wastewater adjustment is a pro forma reduction of ($5,527) in chemical cost due to reuse plant efficiency. The sixth wastewater adjustment reflects increased cost of $3,500 for repair and maintenance of the lift stations. The seventh wastewater adjustment reflects the four-year amortization of the existing and proposed rate case expense. The net effect of combining the unamortized prior rate case expense with the proposed rate case expense is a annual reduction of ($2,320) for water. The eighth wastewater adjustment reflects increased cost of $1,106 to miscellaneous expense. The ninth water adjustment is a reduction of ($2,320) to depreciation expense due to non-used & useful water plant. The eighth water adjustment is an adjustment of $31,173 for depreciation expense associated with pro forma plant. The tenth water adjustment is a reduction of ($13,615) in regulatory

assessment fees to correct booking both 1999 and 2000 regulatory fees in 2000. The final water adjustment reflects the increased of $191 in regulatory assessment fees associated the difference between booked and annualized revenues.

Q. PLEASE EXPLAIN THE C SCHEDULES.

A. As I stated earlier in my direct testimony Zellwood Station Co-op, Inc. is a non-for profit entity. The utility is not requesting a return on common equity and has no state and federal income tax liability, therefore the C Schedules are not applicable.

Q. PLEASE EXPLAIN THE D SCHEDULES.

A. Schedule D-2 pages 1 and 2 of 2 reconcile the two Bank of America loans and the zero cost grant from St. Johns Water Management District back to the water ($195,987) and wastewater ($634,521) rate bases. Schedule D-1 develops the overall rate of return requested by Zellwood. The requested overall rate of return is 7.13%.

Q. IF ZELLWOOD IS A NON-FOR PROFIT WHY IS IT REQUESTING AN OVERALL RATE OF RETURN?

A. The utility is requesting an overall rate of return based upon its two loans with Bank of America and the grant from St. Johns Water Management District. The mechanics of recovering the principal and

interest of these loans for rate-making purposes is by multiplying the water and wastewater rate base by the overall rate of return. Schedules B-1 and B-2 show that Zellwood is requesting $13,968 and $45,224, respectfully as part of its revenue requirements.

Q. PLEASE EXPLAIN THE E-SCHEDULES.

A. The E-Schedules were used to verify present water and wastewater revenues, annualize present revenues for rate adjustments that occurred during or after the historical test year and to design proposed water and wastewater rates.

Q. PLEASE DESCRIBE THE E-2 SCHEDULES.

A. The E-2, E-2A and E-2B Schedules calculates water and wastewater revenues at present and proposed rates using the water and wastewater billing analysis as shown on Schedule E-14. The revenue calculations are developed based upon customer class and meter size.

Q. WHAT IS THE DIFFERENCE BETWEEN BOOKED AND PRESENT REVENUES?

A. Booked revenues are the actual revenues collected in the test year and present revenues reflect annualization of an October 2000 CPI Indexing for both water and wastewater and a tariff clarification of the water use penalty implemented in July of 2001. The annualized

water and wastewater revenue calculation is shown on Schedules E-2A & B.

Q. HOW IMPORTANT WAS THE WATER AND WASTEWATER BILLING ANALYSIS (SCHEDULE –14) IN THE ANNUALIZATION OF PRESENT REVENUES.

A. The billing analysis was used to determine both the number of bills by customer class and meter size as well as the consumption for computing the present water revenues. The present water rates consist of a flat rate and a conservation surcharge. The conservation rates were intended to be a transition from flat rates to full conservation rates using the base facility and gallonage rate design. The goal of the present rates was to allow the utility an opportunity to recover its operating costs while, at the same time , encouraging customers to conserve water. As customer usage exceeds certain threshold levels, the flat rate increases by steps. The first step is a surcharge added to the basic flat service rate. The second level increases by multiples of the basic flat service rate for each range of water consumption, which is called an excessive water use penalty. For a residential customer, if usage for one month is less than 10,000 gallons, then only the basic flat service rate is charged. If usage for one month is between 10,000

and 25,000 but is less than 36,000 gallons, the customer will be charged the excessive water use penalty, which is double the flat monthly service rate. For consumption above 36,000 gallons, the excessive water use penalty increases by multiples of the basic flat rate for each range of water consumption. As you can see from Schedules E-2A & B the billing determinants extracted from the billing analysis was critical in my analysis of present revenues. The present wastewater rate is a flat rate based upon number of bills and meter size. This information came from the wastewater billing analysis.

Q. HAVE YOU DEVELOPED PROPOSED WATER AND WASTEWATER RATES BASED DESIGNED WITH A BASE FACILITY CHARGE AND A GALLONAGE RATE?

A. Yes, I have. Schedules E-1A and B are the cost of service schedules that allocate the water and wastewater revenue requirements between the base facility charge and the gallonage charge. As you can see from the water and wastewater cost of service schedules, I have used Commission allocation methodology to allocate the revenue requirements between the base facility charge and the gallonage charge.

Q. DO YOU HAVE ANY RESERVATIONS AS TO YOUR WATER RATE DESIGN?

A. No, when you divide the water revenue requirements of ($210,699 less miscellaneous revenues) by the total test year factored bills (12,924) you come up with a 5/8" base facility charge of $7.09 per month. The gallonage charge was developed by dividing the gallonage revenue requirements of ($115,021) by 157,208 (MG), which produces a gallonage charge per 1,000 of $0.73. The Commission may want to look at inclining block rates as a conservation tool. I'm concerned as to the consumption levels decreasing via our proposed water rate design, which would affect cash flow and revenue stability.

Q. PLEASE EXPLAIN YOUR PROPOSED WASTEWATER RATE DESIGN.

A. I am proposing a monthly residential wastewater rate that includes a base facility charge and a gallonage charge with a 10,000 cap. The general service base facility charge and gallonage charge would be the same as the residential except there would be no cap at 10,000. The wastewater base facility charge revenue requirements of ($184,585) were divided by the factored bills (12,432), which

produced a base facility charge of $14.85. The gallonage revenue requirements of ($179,380) was divided by the total wastewater gallons of 102, 676 MG (98,850 MG residential at a consumption level of 10,000) and 3,826 MG per Schedule 14A & B), which produced a gallonage charge per 1,00 of $1.75.

Q. DID YOU REVIEW THE MISCELLANEOUS SERVICE CHARGES AND SERVICE AVAILIBILITY FEES?

A. Yes, I did. The existing miscellaneous service charges are cost effective. The service availability fees are adequate especially with the low level of growth the Zellwood is experiencing.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

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