Exhibit No.:
Issues: *Depreciation*
Witness: *ROSELLA L. SCHAD*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Direct Testimony*
Case No.: *SR-2000-556*

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

ROSELLA L. SCHAD

OSAGE WATER COMPANY

CASE NO. SR-2000-556

Jefferson City, Missouri
February 2001

Exhibit No. 8
Date 3-05-01 Case No. SR-2000-556
Reporter KF

DIRECT TESTIMONY

OF

ROSELLA L. SCHAD

OSAGE WATER COMPANY

CASE NO. SR-2000-556

Q. What is your name and business address?

A. Rosella L. Schad, P.O. Box 360, Jefferson City, MO 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission (Commission) as an Engineering Specialist II in the Engineering and Management Services Department.

Q. What are your duties as an Engineering Specialist II in the Engineering and Management Services Department?

A. I am responsible for depreciation calculations and engineering analyses of companies regulated by the Commission.

Q. What are your qualifications, educational background and experience?

A. In 1978 I earned a Bachelor of Science degree in Mechanical Engineering from the University of Missouri-Columbia, and I received E.I.T. (Engineer in Training) certification in 1977. I was employed by Union Electric as an engineer intern during the summer of 1977 and employed as an engineer by Union Electric in its Nuclear Construction Department from 1978-1980. I joined the Commission Staff (Staff) as an Engineering Specialist in 1999.

Q. Have you previously filed testimony before this Commission?

A. Yes. See Schedule 1 for a list of cases in which I have previously filed testimony.

Q. What is the purpose of your testimony in this case?

A. The purpose of my testimony in this case is to present Staff's determination of sewer depreciation rates.

Q. How are depreciation rates used?

A. Depreciation rates (presented in Schedule 2) are used to determine the annual accrual for depreciation. This annual value, called the annual depreciation accrual or depreciation expense, is a portion of the Osage Water Company's (OWC) revenue requirement.

Q. Why is it necessary to make this determination?

A. This determination is necessary because each dollar increase/decrease of OWC's annual depreciation accrual will result in an increase/decrease in its annual revenue requirement. This is important because the revenue requirement represents the money OWC will collect from customers in utility rates.

Q. In a regulated environment, how is the annual depreciation accrual determined?

A. The annual depreciation accrual[1], expressed in dollars, for an account is the difference between the original capital cost dollars of plant and the net salvage dollars in that account, divided by the average service life (ASL)[2], expressed in years, of the plant in that account. This is frequently called straight-line depreciation.

Q. How is the ASL of each account determined?

A. Average service life is determined by analyzing the historical lives for plant retired from each account. In conjunction with this, engineering judgment is utilized to determine if the historical lives are reasonable for current plant in service. The historical data and Iowa-type curves[3] are combined to estimate each account's ASL. Because plant in each account or sub-account (subsidiary record category) is similar, plant in service is normally expected to have an average service life closely equal to the historical experience.

Q. Are Staff's depreciation rates for OWC developed from a study of OWC's historical plant data?

A. Yes, indirectly. A full depreciation study would require that OWC maintain and submit historical data on additions and retirements in a format consistent with Staff's depreciation software. Standardized depreciation rates have been developed using historical data on similar property from other sewer companies and applying engineering judgment to the results. These rates are then assigned to sewer companies

[1] $[Annual Depreciation Accrual] (for the account) = ($[Plant Original Cost] (for the account) - $[Net Salvage] (for the account)) / [Plant Average Service Life, in years] (for the account)

[2] ASL = Average Service Life; The average expected life of all units in an account.

[3] Iowa curves are standard curves that were empirically developed to describe the life characteristics of most industrial and utility property.

that do not have sufficient statistical data to do a company-specific study. Staff reviewed OWC's plant data to determine the appropriate depreciation rate for each account.

Q. How does straight-line depreciation recover original capital cost of plant and current net salvage?

A. Straight-line depreciation recovers original capital cost of plant and current net salvage in equal amounts over the average service life of the plant. For example, if a unit of plant lasts 20 years, OWC will recover $1/20^{th}$ of the plant's original capital cost and the current net salvage for each year over the life of the plant.

Q. What is the annual depreciation accrual amount for OWC's sewer plant based on December 31, 1999 plant balances?

A. The annual depreciation accrual based on December 31, 1999 plant balances is $4400.00. This is the annual amount that OWC should collect from its customers in sewer utility rates as depreciation's portion of its revenue requirement for its sewer operation.

Q. Do you have any recommendations regarding the booking of plant on a functional basis?

A. Yes. Miscellaneous investment booked to Account 375, Other Treatment and Disposal Plant Equipment, should have been included in other utility plant accounts on a functional basis. Instead, all cost should be booked to other ordered accounts. Going forward, Account 375 should not be utilized to record future investment. Additionally, OWC should maintain adequate records to reclassify the investment currently included in Account 375 in any future rate making process for OWC.

Q. What is your proposal in this case?

A. Staff's proposal is: 1) The sewer depreciation rates presented in Schedule 2 as Staff's proposed depreciation rates should be ordered, as of the date OWC's new rates and charges for services become effective; and 2) OWC should be ordered to book plant to utility plant accounts, as defined in 4 CSR 240-61.020 and as adopted by this Commission.

Q. Does this conclude your direct testimony?

A. Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Osage Water Company's Request For A Rate Increase For Sewer Service Pursuant To The Public Service Commission's Small Company Rate Increase Procedure.	))))	Case No. SR-2000-556

AFFIDAVIT OF ROSELLA L. SCHAD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Rosella L. Schad, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 5 pages to be presented in the above case; that the answers in the foregoing Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Rosella L. Schad
Rosella L. Schad

Subscribed and sworn to before me this 13th day of February 2001.

D Suzie Mankin

D SUZIE MANKIN
NOTARY PUBLIC STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. JUNE 21,2004

RATE CASE PROCEEDING PARTICIPATION

ROSELLA L. SCHAD

COMPANY	CASE NO.
Iamo Telephone Company	TT-2001-116
Peace Valley Telephone Company	TT-2001-118
Holway Telephone Company	TT-2001-119
KLM Telephone Company	TT-2001-120
Ozark Telephone Company	TC-2001-402

Schedule 1

OSAGE WATER COMPANY
DEPRECIATION RATES
(SEWER)
CASE NO. SR-2000-556

ACCOUNT NUMBER	ACCOUNT	DEPRECIATION RATE %	AVERAGE SERVICE LIFE (YEARS)
351	Structures & Improvements	3.0%	33
352.1	Collection Sewers (Force)	2.0%	50
352.2	Collection Sewers (Gravity)	2.0%	50
353	Services to Customers	2.0%	50
354	Flow Measurement Devices	3.3%	30
362	Receiving Wells	5.0%	20
363	Electric Pumping Equipment	10.0%	10
372	Treatment & Disposal Equipment	4.5%	22
373	Plant Sewers	4.5%	22
374	Outfall Sewer Lines	2.0%	50
375	Other Treatment & Disposal Equipment	2.0%	50
391	Office Furniture & Equipment	5.0%	20
391.1	Office Computer Equipment	14.3%	7
392	Transportation Equipment (10% Salvage)	13.0%	7
393	Stores	10.0%	10
394	Tools, Shop, & Garage Equipment	5.0%	20
395	Laboratory Equipment	5.0%	20
396	Power Operated Equipment	6.7%	15
397	Communication Equipment	6.7%	15