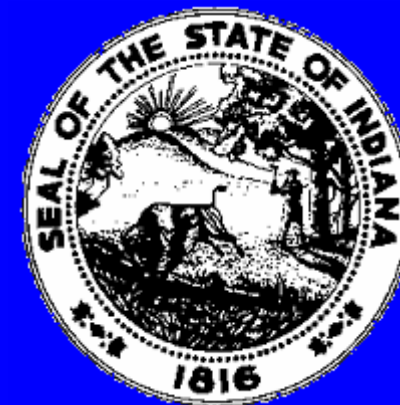


Indiana Utility Regulatory Commission

Ratemaking for Investor-Owned Utilities

Curt Gassert/Jerry Webb
September 2007



Revenue Requirements:

Investor-Owned Utilities (*I.C. 8-1-2-4*)

- Operation and Maintenance Expense
- Depreciation
- Taxes Other Than Income
- Income Taxes
- Net Operating Income (NOI)*

*NOI or Return on Investment = Rate Base times Weighted
Cost of Capital



Rate Base

Typical Components of Rate Base Include:

- Utility Plant in Service
- Less: Accumulated Depreciation
- Add: Materials and Supplies
- Add: Working Capital



Rate Base (continued)

Other Rate Base Components May Include:

- Contributions In Aid of Construction
- Customer Advances for Construction
- Regulatory Assets
- Deferred Income Taxes

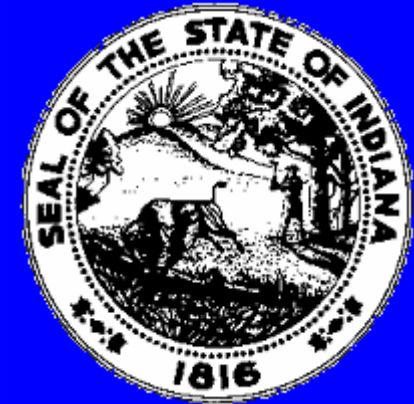


Capital Structure

Typical Components of Capital Structure
Include:

- Long-Term Debt
 - Common Equity
 - Preferred Stock
 - Deferred Income Taxes
 - Customer Deposits
-

Balance Sheet:



XYZ Utility, Inc. Balance Sheet December 31, 2006

Utility Plant in Service	\$25,000	Debt	\$10,000
Less: Accumulated Depreciation	<u>(5,000)</u>	Equity	<u>10,000</u>
Total Assets	\$20,000	Total Debt & Equity	\$20,000
	=====		=====

Weighted Cost of Capital



Capital Structure:

	<u>Amount</u>	<u>% of Capital</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Debt	\$10,000	50%	8%	4%
Equity	<u>10,000</u>	<u>50%</u>	12%	<u>6%</u>
Weighted Cost of Capital	\$20,000	100%		10%
	=====			===

Rate Base times Weighted Cost of Capital:



Rate Base Calculation:

Utility Plant in Service	\$ 25,000
Less: Accumulated Depreciation	<u>5,000</u>
Rate Base	\$ 20,000
Times: Weighted Cost of Capital	<u>10%</u>
Net Operating Income	\$ 2,000
	=====

Debt	\$10,000	Equity	\$10,000
Interest Rate	<u>8.0%</u>	Cost of Equity	<u>12.0%</u>
Interest Expense	\$800	SH Return	\$1,200
	=====		=====



Vectren South Electric Case:

Agreed to Original Cost Rate Base:

As of 10/31/06

(000's)

Utility Plant in Service

\$1,783,735

Less: Accumulated Depreciation

812,809

Net Utility Plant in Service

970,926

Add: Materials and Supplies

42,987

DSM Regulatory Asset

29,156

Other Regulatory Assets

650

Total Rate Base

\$1,043,719

=====

Vectren South Electric Case:



Agreed to Capital Structure

As of March 31, 2006:

	% of Capital	Cost Rate	Weighted Cost
Common Equity	47.05%	10.40%	4.89%
Long Term Debt	38.65%	6.04%	2.34%
Customer Deposits	0.48%	5.39%	0.03%
Deferred Income Taxes	13.06%	0.00%	0.00%
Post 1970 JDITC	<u>0.76%</u>	8.43%	<u>0.06%</u>
Total	<u>100.00%</u>		<u>7.32%</u>

Operation and Maintenance Expenses



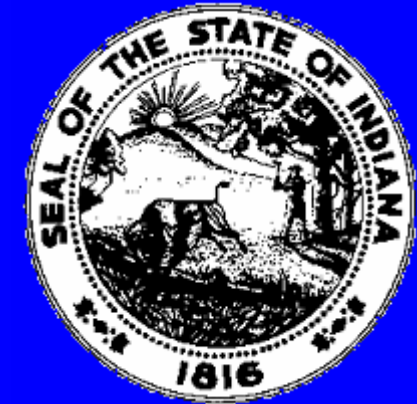
- Allowable expenses are those costs considered reasonable and necessary to provide the service.
 - Expenses incurred by the utility that are not considered reasonable or necessary are excluded from the revenue requirement and absorbed by the utility.
 - Disallowed expenses are sometimes referred to as “below-the-line” expenses.
-

Determination of Allowable Expenses



- A historical “test year” is established as a starting point.
 - The test year data is adjusted for “fixed, known and measurable” changes to calculate expenses that are considered to be representative of the conditions during which the rates are to be in effect.
 - These changes are typically referred to as “pro forma adjustments.”
-

Pro form Net Operating Income Statement



XYZ Utility, Inc.

Cause No. 43500

Pro forma Net Operating Income Statement

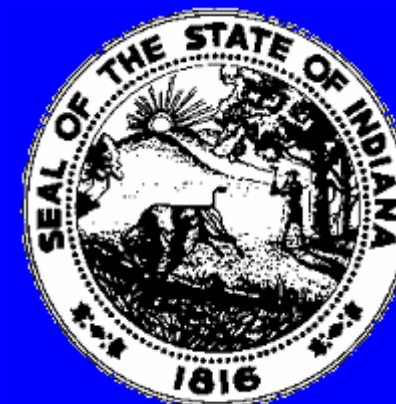
<u>Description</u>	<u>Test Year</u> <u>12/31/06</u>	<u>Adjs.</u>	<u>Pro forma</u> <u>Present</u>	<u>Adjs.</u>	<u>Pro forma</u> <u>Proposed</u>
Operating Revenues:					
Sales	\$ 4,840	\$160	\$5,000		
Penalties					
Total Operating Rev.	<u>4,840</u>	<u>160</u>	<u>5,000</u>		
Operating Expenses:					
Salaries	1,955	\$200	2,155		
Depreciation	625		625		
Taxes	<u>993</u>	<u>(7)</u>	<u>986</u>		
Total Operating Exp	<u>3,573</u>	<u>193</u>	<u>3,766</u>		
Net Operating Income	\$1,267	\$ (33)	\$1,234		
	=====	=====	=====		



Revenues

- Once the pro forma present rate revenues and expenses have been determined, the resulting net operating income is compared to the previously calculated net operating income.
 - Revenues are then increased or decreased so that the required or previously calculated net operating income will result.
-

Pro form Net Operating Income Statement (Continued)



XYZ Utility, Inc.

Cause No. 43500

Pro forma Net Operating Income Statement

<u>Description</u>	<u>Test Year</u> <u>12/31/06</u>	<u>Adjs.</u>	<u>Pro forma</u> <u>Present</u>	<u>Adjs.</u>	<u>Pro forma</u> <u>Proposed</u>
Operating Revenues:					
Sales	\$ 4,840	\$160	\$5,000	\$ 1,000	\$6,000
Penalties					
Total Operating Rev.	<u>4,840</u>	<u>160</u>	<u>5,000</u>	<u>1,000</u>	<u>6,000</u>
Operating Expenses:					
Salaries	1,955	200	2,155		2,155
Depreciation	625		625		625
Taxes	<u>993</u>	<u>(7)</u>	<u>986</u>	<u>234</u>	<u>1,220</u>
Total Operating Exp.	<u>3,573</u>	<u>193</u>	<u>3,766</u>	<u>234</u>	<u>4,000</u>
Net Operating Income	\$1,267	\$ (33)	\$1,234	\$ 766	\$2,000
	=====	=====	=====	=====	=====