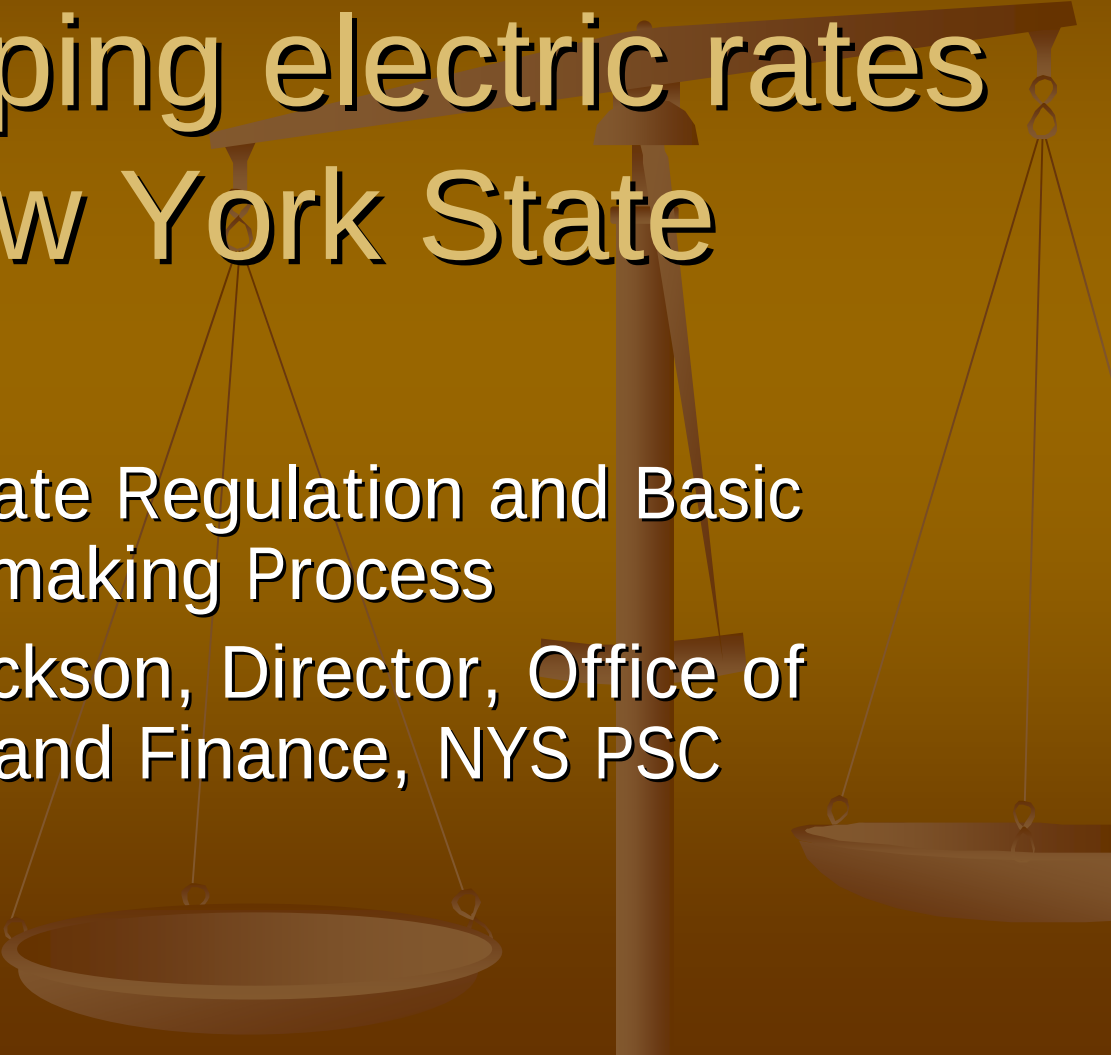




Tariff Development I Process for developing electric rates in New York State

Overview of Rate Regulation and Basic
Ratemaking Process

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General Overview of Utility Ratemaking in NYS

- The majority of the NYS Utilities are “Investor Owned” rather than publicly (stated) owned. This means that there is “capital at-risk” for the utilities.
- The utilities issue both stock and bonds to finance the investment they are required to make in public utility assets and they recover the underlying cost of the investment through Depreciation Expense over time. During that time period they also recover the financing costs (dividends and interest) of the capital issued to fund construction.
- NYS Utilities’ rates are set using the “Cost of Service” approach.
- This means that the rates are based upon the actual costs incurred by the utilities to provide service. This approach relies upon the “Original Cost of Rate Base” Principle. In other words, the assets (wires, poles, meters, generators, substations, etc.) are valued for ratemaking at their original construction cost and are not indexed for inflation or increases in reproduction cost.
- The assets are expected to last an estimated period of years and the original cost is charged to ratepayers over that period of time as Depreciation Expense.

General Ratemaking Principles

- When a utility has monopoly market power, its prices, earnings and service should be regulated to protect captive customers.
- Utility regulatory commissions serve as a “proxy” for competition.
- Prices (rates) should be “just and reasonable” and should cover the costs of providing “safe and adequate” service.
- Investors who lend capital to fund utility assets should be allowed an opportunity to earn a reasonable rate of return and be able to expect to recover the principal of the capital over time.
- The rates should be based upon prudently incurred costs.
- Utilities should have incentives to keep costs down and provide good service.

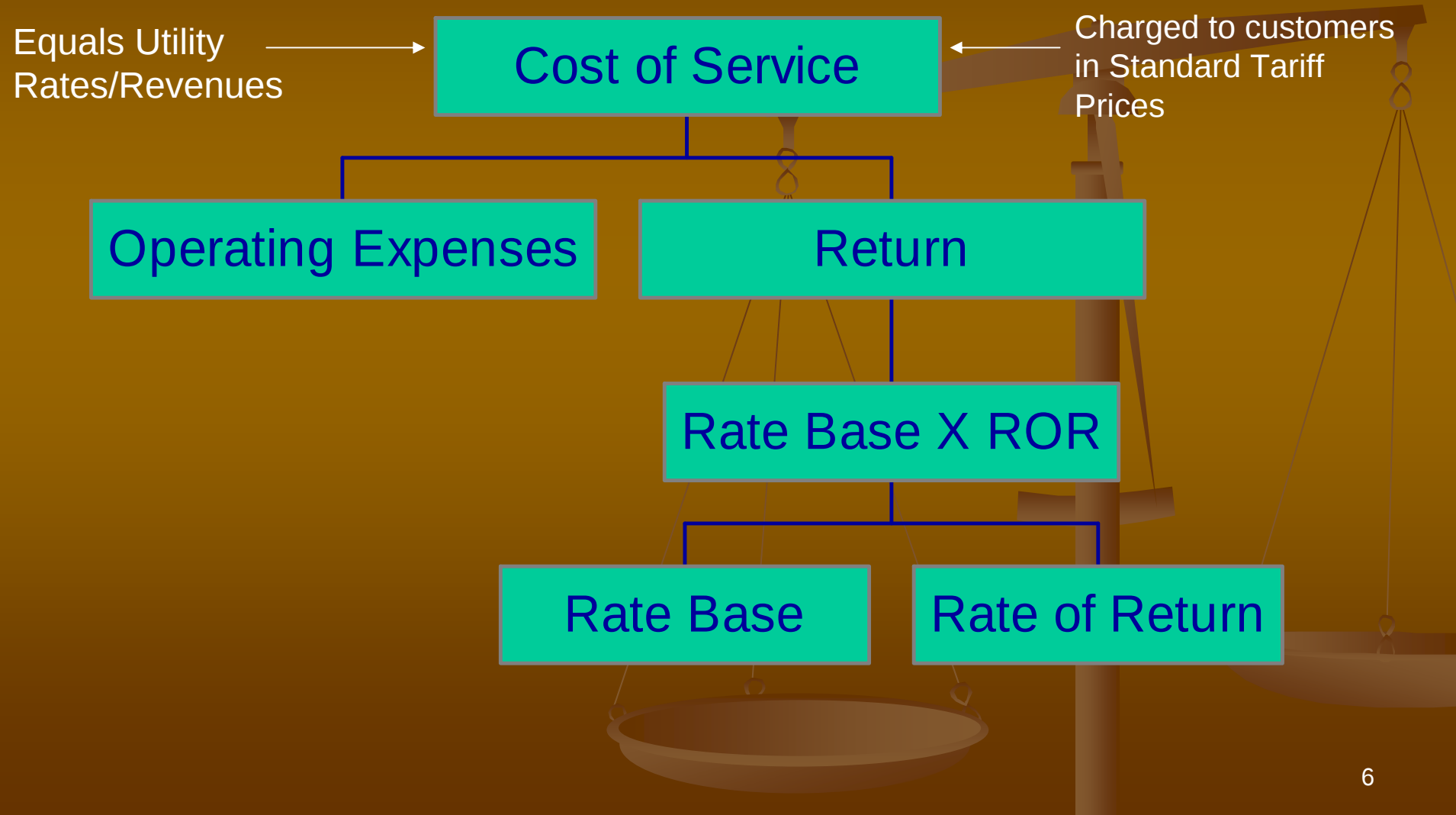
Alternative Pricing Models

- Generally, the pricing model used is based upon specific forecasts of utility revenues and costs for given periods of time.
- In the past, we have examined the price cap model to determine its usefulness.
- When using price caps, we have put into place limits on revenues which have effectively created “fixed prices” including the usually variable costs of generating fuel.
- The price cap approach would be based upon the relationship between costs and revenues in an historical test period and rates would be indexed by annual inflation minus a annual productivity offset.
- The utility would be at risk for costs in excess of the price cap amounts or stand to gain if productivity estimates were exceeded.
- Earnings outside an agreed-upon tolerance band would be shared between ratepayers and shareholders.
- The benefits of the price cap approach include the ability to set rates for several years and an implicit cost control incentive. The downside of such an approach is that management may be inclined to cut too deeply into service-affecting programs in an effort to raise earnings resulting
- We have also put into place multi-year rate plans, so called Performance Based Rates or PBR's which are a hybrid of traditional Cost of Service ratemaking and Price Caps. In this model, some items are subject to explicit flow through to customers' bills (e.g. fuel and purchased power), some costs are subject to varying amounts of deferral and true-up to permit future rate recovery or refund and the remainder of costs are estimated and not subject to any other adjustment during the term of the rate plan. Again, earnings outside an agreed-upon tolerance band are shared. This approach has the benefit of facilitating multi-year rate setting, ensuring that important goals are accomplished and retaining a cost cutting incentive. While this method is being continuously refined, it is, in my judgment, the best available model.

General Overview of Utility Ratemaking in NYS – Cont'd.

- Utility rate tariffs have both “Capital Components” and “Operating Components”
- The Capital Component include the Return on Equity, the Interest on Debt and the Depreciation Expense.
- The Operating Component includes the annual Operation and Maintenance Expenses, Taxes, Fuel and Purchased Power Costs and Administrative Expenses.

Illustration of the Relationship of the Cost of Service to Utility Rates



The Process For Changing Utility Rates in NYS

- The utility seeking to change rates must file sufficient financial and operating information to support any change in rates.
- Such financial and operating information must be supported by testimony of responsible utility executives who swear to the accuracy of what is presented.
- The filing of a request sets in motion an 11 month clock within which Dept. Staff must and other interested parties may review the filing.
- The format of the filing is specified by a 1977 Commission Statement of Policy which requires the use of estimated revenues, expenses and rate base amounts which are built up from an historical “test period”.

Example of Utility Cost of Service Revenue Requirement Schedule

Central Hudson Gas & Electric Corporation Electric Operations Income Statement and Rate of Return for Periods Indicated (\$000)

	Twelve Months Ended March 31, 2005			Year Ending December 31, 2005	Year Ending December 31, 2006
	Per Books	Normalizing Adjustment Ref Amount	As Adjusted		
Operating Revenues					
Own Territory Delivery Revenues	\$164,832	1. \$2,412	\$167,244	\$167,051	\$170,810
ECAM Revenues	256,691	2. (256,691)	0	0	0
SBC Surcharge Revenues	5,101	3. (5,101)	0	0	0
Deferred Revenues	0		0	0	0
Subtotal - Delivery Rates	426,624		167,244	167,051	170,810
Resale Revenues	5,684	4. (5,684)	0	0	0
Other Operating Revenues	5,668	5. 450	6,118	6,453	5,935
Total Operating Revenues	437,976		173,362	173,504	176,745
Operating Expenses					
Fuel	116	6. (116)	0	0	0
Purchased Power	257,259	7. (257,259)	0	0	0
Water for Power	644	8. (644)	0	0	0
System Benefits Charge	5,101	9. (5,101)	0	0	0
CBA - Competition Education	51	10. (51)	0	0	0
CBA - Economic Development	1,340	11. (1,340)	0	0	0
CBA - Low Income Aggregation	14	12. (14)	0	0	0
Production Maintenance	80	13. 55	135	137	140
Right of Way Maintenance	7,272		7,272	4,151	7,982
Labor	37,099	14. (7)	37,092	38,106	39,287
Research and Development	1,644		1,644	1,962	2,057
Expenses Projected Based on Inflation	8,595	15. 155	8,750	8,890	9,068
Miscellaneous General Expenses	2,229	16. 123	2,352	2,331	2,370
Transportation Depreciation	1,273		1,273	1,265	1,308
Fringe Benefits	5,179	17. 138	5,317	5,493	5,819
Other Post Employee Benefits	1,584		1,584	5,729	5,729
Pension Plan	(11,178)		(11,178)	(11,477)	311
Contract Rents	2,405	18. (277)	2,128	2,105	2,113
Uncollectible Accounts	4,393	19. (3,441)	952	966	988
Regulatory Commission Expenses	1,195		1,195	1,398	1,443
Data Processing Expense	2,587		2,587	2,623	2,711
Other Operating Insurance	1,418		1,418	1,390	1,376
Telephone	1,392	20. 41	1,433	1,486	1,520
Legal Services	2,110	21. 81	2,191	2,226	2,270
Special Services	1,403		1,403	1,426	1,454
Injuries and Damages	2,156	22. (156)	2,000	2,040	2,084
Storm Expense	3,133	23. 1,393	4,526	4,598	4,690
Environmental	519		519	649	309
Powerful Opportunities Program	980	24. 15	995	995	995
Expenses Allocated to Affiliates	(469)		(469)	(477)	(486)
Stray Voltage Testing	0		0	1,250	800
MGP Remediation Cost Recovery	0		0	0	0
Recovery of Net Regulatory Assets	0		0	0	0
Total Operating Expenses	341,524		75,119	75,140	96,338
Other Deductions					
Variable Rate Debt Interest Overcollection	1,015		1,015	527	65
Amort of Preferred Redemption Premium	68		68	68	34
Amort of Demutualization Proceeds	(239)		(239)	0	0
Property Taxes	18,546		18,546	19,284	20,125
Revenue Taxes	1,708	25. 1,003	2,711	3,040	2,965
Payroll Taxes	3,059		3,059	2,892	2,982
Other Taxes	1,232	26. (35)	1,197	1,216	1,240
Depreciation	22,412		22,412	23,271	23,246
Total Other Deductions	47,801		48,769	50,298	50,657
Federal Income Taxes	14,274	27. 573	14,847	13,716	6,712
State Income Taxes	2,676	28. (815)	1,861	1,709	752
Total Income Taxes	16,950		16,708	15,425	7,464
Total Operating Revenue Deductions	406,275		140,596	140,863	154,459
Operating Income	31,701		32,766	32,641	22,286
Rate Base	416,768		416,766	431,289	462,276
Rate of Return	7.61%		7.86%	7.57%	4.82%

Forecasting Revenues

- Forecasting revenues is accomplished through econometric modeling.
- The variables considered include weather, employment, growth in disposable income, price elasticity, increased reliance on appliances, general economic growth and other factors.
- Changes in the estimated cost of generating fuels is also factored into the model in

Operation & Maintenance Expense

- Labor and Fringe Benefits
- Advertising
- Insurance
- Conservation
- Research and Development
- Purchased Power, Gas or Water
- Fuel Adjustment
- Legal Costs
- Mandated program costs



Projected O&M Expenses

- Historical Level from “Test year” is adjusted in several ways:
 - Known Changes
 - Annualization of part year changes
 - Normalization of unusual events
 - Forecasts of new or expiring programs
 - Inflation

Depreciation Expense

- With large, capital intensive fixed plant, depreciation is an important factor in setting rates.
- GAAP vs. Book Depreciation (GAAP asset lives are generally shorter than the lives set in a regulatory environment.)
- Rates are adjusted to 1) take account of large plant additions and 2) modify depreciation rates to account for changes in “mortality” or useful life estimates.

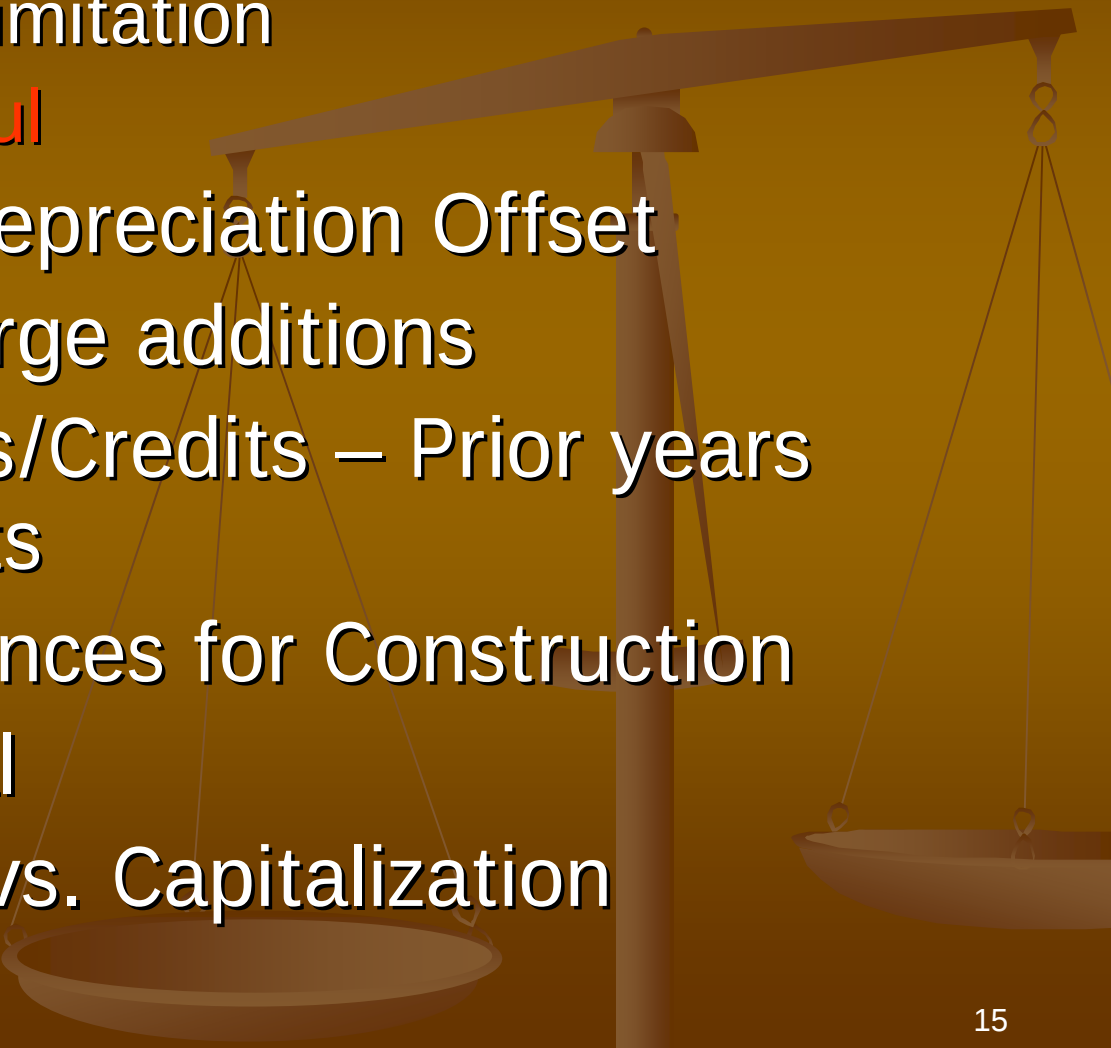
Income Taxes

- Each utility is subject to both Federal and State Income Taxes
- These rules prescribe accounting and ratemaking for Accelerated Tax Depreciation
- Normalization Rules apply to Deferred Income Taxes to spread tax benefits over book depreciation lives
- Benefits from Capitalized Construction Overheads and Capitalized Interest must also be deferred and normalized
- Similar requirements exist for Accrued but Unbilled Revenue, Bad Debts and Contributions in aid of Construction

Other Taxes

- Revenue Taxes apply to utility bills
 - Gross Earnings
 - Gross Income (similar to Gross Earnings but at a different rate)
 - Local Metropolitan Transit Authority taxes to help fund mass transit in NYC
 - Corporate Surcharge
- Payroll Taxes
 - Social Security Taxes
 - Unemployment Insurance
- Property Taxes

Rate Base

- Utility Plant
 - Original Cost Limitation
 - **Used and Useful**
 - Accumulated Depreciation Offset
 - Phase-Ins of large additions
 - Deferred Debits/Credits – Prior years costs or benefits
 - Customer Advances for Construction
 - Working Capital
 - Earnings Base vs. Capitalization
- 

Used and Useful Plant

- Plant that is included in rate base should be what is actually necessary to provide service. This is generally referred to as “in-service”.
- Plant which is far in excess of the customers’ needs or is non-utility in nature is usually not part of rate base.
- Failed investments in plant for projects which were not completed are examined in detail to determine if the management acted appropriately in making the initial investment and, if so, rate recovery can be granted as an exception to the used and useful rule.

Rate Base vs. Capitalization

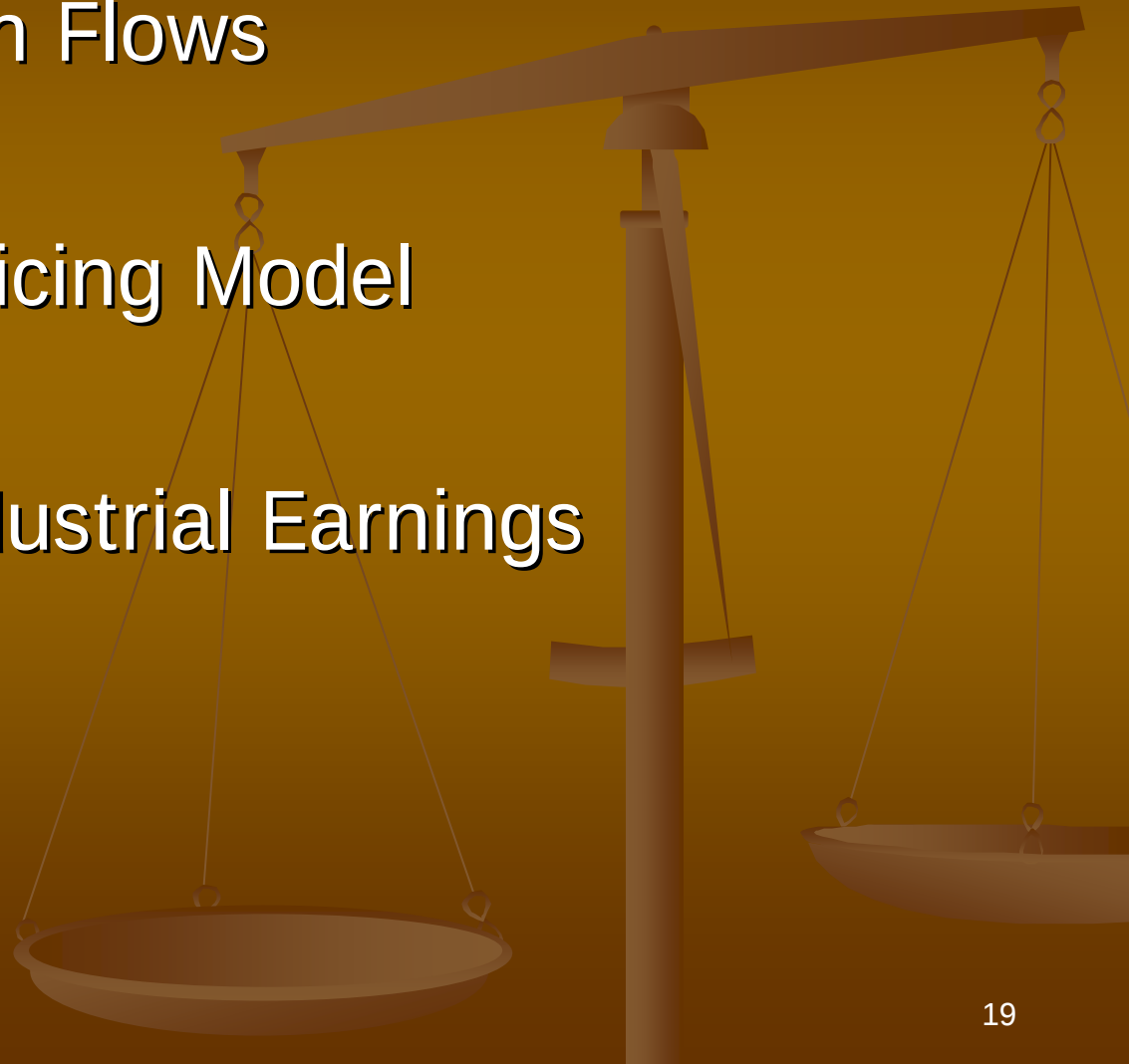
- Rate Base is supported by various forms of investor Capital
- Capital Components
- **Long-Term Debt** - fixed cost rates.
- **Preferred Stock** - fixed cost rates.
- **Common Equity** - Cost is determined by the Commission based upon Fair Rate of Return Theory.
- Some forms of capital are available at zero cost due largely to the errors in estimating working capital.
- Accordingly, care is take to ensure that the rate base is reduced by this cost free capital.

Fair Rate of Return Theory

- A return available from investments with comparable risks.
- Return sufficient to attract new capital.
- Return sufficient to maintain creditworthiness (“A” Bond Rating)
- In setting the Fair Rate of Return, the Commission can exercise a degree of discretion due to the relative imprecision of the various estimation methodologies

Cost of Equity Methods

- Discounted Cash Flows
- Capital Asset Pricing Model
- Comparable Industrial Earnings
- Spread Studies



Financial Data Collection and Processing

- Each large utility's stock is publicly traded and under the jurisdiction of the Securities Exchange Commission making them subject to annual audits by external CPA firms.
- Each of these utilities follow both Generally Accepted Accounting Principles and Regulatory Accounting.
- Regulatory Accounting is prescribed by both the Federal Energy Regulatory Commission and by any of the State regulatory commissions in which a utility operates.
- Regulatory Accounting requirements are defined by a Uniform System of Accounts (FERC USOA separately provided).
- The utilities' books and records are also open to audit by NYSPSC auditors.
- The utilities are required to file annual financial reports with the NYSPSC in addition to other information directed by the Commission in rate or other cases.

Uniform System of Accounts

- This document prescribes all of the required methods of accounting for specific costs, plant and revenues.
- The USOA contains instructions as to what items are included and excluded. An example of the type of instructions and specification is shown on the following slide.

FERC USOA

585 Street lighting and signal system expenses.

A. For Nonmajor utilities, this account shall include the cost of labor, materials used and expenses incurred in the operation of street lighting and signal system plant.

B. For Major utilities, this account shall include the cost of labor, materials used and expenses incurred in: (a) The operation of street lighting and signal system plant which is owned or leased by the utility; and (b) the operation and maintenance of such plant owned by customers where such work is done regularly as a part of the street lighting and signal system service.

ITEMS

Labor:

1. Supervising street lighting and signal systems operation.
2. Replacing lamps and incidental cleaning of glassware and fixtures in connection therewith.
3. Routine patrolling for lamp outages, extraneous nuisances or encroachments, etc.
4. Testing lines and equipment including voltage and current measurement.
5. Winding and inspection of time switch and other controls.

Materials and Expenses:

6. Street lamp renewals.
7. Transportation and tool expense.
8. Meals, traveling, and incidental expenses.

586 Meter expenses.

This account shall include the cost of labor, materials used and expenses incurred in the operation of customer meters and associated equipment.

ITEMS

Labor:

1. Supervising meter operation.
2. Clerical work on meter history and associated equipment record cards, test cards, and reports.
3. Disconnecting and reconnecting, removing and reinstalling, sealing and unsealing meters and other metering equipment in connection with initiating or terminating services including the cost of obtaining meter readings, if incidental to such operation.
4. Consolidating meter installations due to elimination of separate meters for different rates of service.
5. Changing or relocating meters, instrument transformers, time switches, and other metering equipment.

6. Resetting time controls, checking operation of demand meters and other metering equipment, when done as an independent operation.

7. Inspecting and adjusting meter testing equipment.

8. Inspecting and testing meters, instrument transformers, time switches, and other metering equipment on premises or in shops excluding inspecting and testing incidental to maintenance

Materials and Expenses:

9. Meter seals and miscellaneous meter supplies.
10. Transportation expenses.
11. Meals, traveling, and incidental expenses.
12. Tool expenses.

NOTE: The cost of the first setting and testing of a meter is chargeable to utility plant account 370, Meters.

587 Customer installations expenses.

This account shall include the cost of labor, materials used and expenses incurred in work on customer installations in inspecting premises and in rendering services to customers of the nature of those indicated by the list of items hereunder.

ITEMS

Labor:

1. Supervising customer installations work.
2. Inspecting premises, including check of wiring for code compliance.
3. Investigating, locating, and clearing grounds on customers' wiring.
4. Investigating service complaints, including load tests of motors and lighting and power circuits on customers' premises; field investigations of complaints on bills or of voltage.
5. Installing, removing, renewing, and changing lamps and fuses.
6. Radio, television and similar interference work including erection of new aerials on customers' premises and patrolling of lines, testing of lightning arresters, inspection of pole hardware, etc., and examination on or off premises of customers' appliances, wiring, or equipment to locate cause of interference.
7. Installing, connecting, reinstalling, or removing leased property on customers' premises.
8. Testing, adjusting, and repairing customers' fixtures and appliances in shop or on premises.
9. Cost of changing customers' equipment due to changes in service characteristics.
10. Investigation of current diversion including setting and removal of check meters