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Regulatory and Legal Framework of Audit Function

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Definition of “Audit”

- What is an “Audit?”
 - The word “audit” can mean many things
 - Normally, it is thought of as a review and assessment of financial data by an “independent” observer
 - “Independent” in this sense means that, at a minimum, the observer did not play a role in organizing or compiling the financial data under audit

Definition of “Audit”

- An audit is usually performed to provide some type of “assurance” to a user of the financial information being reviewed
- “Assurance” is not the same thing as a guarantee

Definition of “Audit”

- Audits can be performed for many purposes, including:
 - **Attestation**, or providing an assessment of the accuracy and completeness of financial data
 - **Compliance**, or verifying that data was compiled appropriately according to a set of pre-existing accounting standards or guidelines
 - **Efficiency**, or investigating whether an entity is being operated in a reasonably cost-effective manner

Definition of “Audit”

- At the Missouri Commission, audits have been conducted of utility companies for the following reasons:
 - To assess the overall responsiveness of the company in dealing with its customers and the general public
 - To investigate the financial viability of “troubled” utilities
 - To investigate allegations of possible fraud or criminal activity by the utility or its employees

Definition of “Audit”

- However, the primary reason the Missouri Commission conducts audits of utilities under its jurisdiction is to assess in detail the need for a utility to change its customer rate levels
- Most frequently, audits are conducted when a utility seeks a general rate increase

Definition of “Audit”

- Audits are also conducted when Commission Staff or another entity files an “earnings complaint against a utility;” i.e., an allegation that the utility is excessively earning and should have its general rates reduced
- Audits of more limited scope are conducted in conjunction with single-issue rate mechanisms

Definition of “Audit”

- In Missouri, rate case audits are significantly different from other types of financial audits
- Although proposals to change utility rate levels are based as a starting point on the company’s actual financial results, what is being audited is the Company’s request to change its rates, which does not have to be entirely based on actual earnings results

Definition of “Audit”

- Ultimately, the Staff’s rate case audit recommendations are just one set of recommendations among many
- However, the Staff differs from almost all other rate case parties in that it is financially disinterested from the results of the ultimate Commission decision on a rate increase request

Definition of “Audit”

- A key point to understand: the ratemaking process in Missouri is “quasi-judicial”
 - Fundamentally, this means that the decisions the Commission makes regarding the rate levels that can be charged by utilities under its jurisdiction must be based upon an evidentiary record

Definition of “Audit”

- An overriding purpose of the rate case audit process in Missouri is to provide the basis under which adequate evidence can be presented to the Commission regarding the ratemaking issues that come before it
- The quasi-judicial nature of the ratemaking process also means the Commission cannot directly supervise or provide oversight to Staff audits

Missouri Rate Regulation

- Ratemaking in Missouri is based upon a measurement of a utility's prudent and reasonable costs, calculated on an annual basis
 - These costs include day-to-day expenses, an allocated portion of long-term capital expenditures (depreciation expense), income taxes and a reasonable rate of return on utility rate base (profit)

Missouri Rate Regulation

- Customers are responsible for direct funding of utility expenses, taxes and rate of return
- Utility shareholders are responsible for funding long-term capital projects, who are then reimbursed by customers for this investment over the expected life of the projects

Missouri Rate Regulation

- Utilities have the *opportunity* to recover their costs and earn a reasonable rate of return, but not a *guarantee* of a particular profit level
 - Once new rates are put into effect, that rate level may produce revenues that are greater or less than the utility's actual cost of service at any point in time

Missouri Rate Regulation

- Ratemaking in Missouri is *Prospective* in Nature
 - In other words, ratemaking in Missouri is intended to allow a utility an opportunity to recover the level of costs it will incur during the time new rates will be in effect, not to reimburse the utility for the costs incurred in prior periods
 - The prospective nature of the ratemaking process in Missouri changes the focus of the Commission audits of the utility to some degree from the approach that would be used if a retrospective approach to ratemaking was employed

Missouri Rate Regulation

- How is an audit of a utility's past recorded costs related to a goal of setting rates on a prospective basis?
 - Answer: Historical results must be “adjusted” to become properly prospective in nature.
 - Arguments about what adjustments to a utility's past recorded costs are appropriate in setting rates are a major controversy in Missouri rate cases

Missouri Rate Regulation

- In Missouri, ratemaking is based upon all of a utility's costs, measured consistently at a point in time.
 - Ratemaking usually is not based upon fluctuations in stand-alone cost areas, but there are exceptions to this principle

Missouri Rate Regulation

- Fundamental Definitions:
 - Cost of Service: all of a utility's costs includable in its rates, including an appropriate return on investment, as measured in a rate case
 - Revenue Requirement: the necessary change in rates at any point in time in order to allow the utility to recover its cost of service
 - Rate Design: the assignment of cost of service to different customer classes
 - Rate Base: the total shareholder investment in utility operations at a point in time

Missouri Rate Regulation

- Regulation is intended to be a substitute for competition
 - As monopolies, regulation should impose a certain level of risk on utilities
 - The major risk faced by utilities is their actual earned rate of return may be less than the return authorized for them by the Commission
 - The rate of return authorized by the Commission for a particular utility is intended to compensate utilities for that risk

Missouri Rate Regulation

- Because ratemaking in Missouri is prospective in nature, utilities are not allowed to be reimbursed currently for prior deficient earnings levels
- Likewise, utility customers are not entitled to a refund of prior excessive earnings by a utility.

Missouri Rate Regulation

- Rates should be based upon *all relevant factors*.
 - All elements of expense, rate base, revenues and rate of return are normally examined in setting rates.
 - “Single-issue” ratemaking is generally prohibited, because increases in a utility’s cost of service in one area may be offset in whole or in part by decreases in another area of the utility’s cost of service

Missouri Rate Regulation

- Rates are established based upon a particular revenue/expense/rate base relationship as measured at a point in time
- Changes in any one of those elements does not necessarily mean that the utility's existing rates are no longer valid; all three elements have to be examined in tandem in order to make that determination

Missouri Rate Regulation

- Rates are based upon *known and measurable* costs.
 - Known: has occurred or is virtually certain of occurring
 - Measurable: is capable of being accurately quantified
 - This policy means that rates are not generally set in Missouri to cover the cost impact of future events

Missouri Rate Regulation

- All elements of cost of service should be measured at a consistent point in time
 - This is known as the “*Matching Principle*”
 - One reason for use of the matching principle is that financial events can have interrelated effects on different cost of service areas
 - For example, capital additions can result in overall reductions to expense

Missouri Rate Regulation

- Customers should only pay for costs that are *prudently* incurred.
 - Prudence is determined through a “reasonable person” standard
 - Prudence is not determined through a hindsight analysis, but by a review of the facts known at the time the relevant decision was made

Missouri Rate Regulation

- All ratemaking principles must be applied and balanced against each other; sometimes one principle will conflict with another
- There are not always “right” answers in setting rates; sometimes “judgment calls” by the Commission are required

Commission Audit Authority

- In Missouri, the Commission has been granted wide regulatory powers to regulate utilities operating within the State's borders
- In summary, through its regulation the Commission is tasked to ensure that utilities offer **safe and adequate service** to customers at **just and reasonable rates**.

Commission Audit Authority

- “Safe and adequate service:”
 - Safe – Customers adequately protected from physical harm as a result of use of utility service
 - Adequate – customers receive utility service in a quantity sufficient to supply their ongoing demands

Commission Audit Authority

- “Just and Reasonable Rates:”
 - Rates that are fair to both a utility and its customers. In general, this means the rates are sufficient to cover a utility’s prudent expenses that are necessary for the provision of service to customers, and that the rates also allow the utility to receive a reasonable return on funds invested

Commission Audit Authority

- The Commission's guiding purpose in setting rates is to protect customers against the fact of the natural monopoly of the public utility, generally the sole provider of a public necessity in a geographic area
- However, the company and its stockholders have a right to a reasonable opportunity to earn a fair return on its investment

Commission Audit Authority

- The Commission has authority to set and maintain utilities' accounting systems, and to prescribe the specific accounts to be used and the costs to place in each account
- In this respect, the Commission has required that a “uniform system of accounts” be used by gas and electric utilities under its jurisdiction
- Companies are required to comply with the uniform system of accounts for their industry by Commission rule, and may be subject to penalty if they do not follow these guidelines

Commission Audit Authority

- The utilities' accounting systems form the underpinning for the Missouri ratemaking process
- The actual revenues, expenses and capital costs recorded by a utility in a given 12-month period (the “test year”) are the starting point for the ratemaking process

Commission Audit Authority

- As an example of the Commission's authority over accounting matters, the Commission determines what costs incurred by a utility should be treated as a "period cost," (eligible for rate recovery in entirety in the period in which the cost is incurred), and which costs should be treated as a "capital cost," (eligible for rate recovery over the periods in which the asset in question is used in the provision of utility service)

Commission Audit Authority

- “The Commission...shall have power to examine the accounts, books, contracts, records, documents and papers of any such corporation or person, and have power, after hearing, to prescribe by order the accounts in which particular outlays and receipts shall be entered, charge, or credited”
 - This language from Missouri statutes is the basis for the Commission’s authority to conduct audits of utilities

Independence

- All auditors of every type are expected to apply independent judgment to the particular costs being examined
 - The concept of independence implies objectivity and lack of bias on the part of the auditor
 - If believed to be objective and unbiased, auditors' opinions can be given greater weight by the users of the audit information

Independence

- The Missouri Commission requires independence on the part of its auditors, and in fact all of its Staff
 - We are required to attest to our independence on an annual basis, and immediately notify the Commission if an event occurs that could impair our independence
 - In our annual attestation, we are required to list any relatives that work for a utility in Missouri

Independence

- Commission employees are prohibited from accepting gifts or gratuities from utilities or their employees
- Commission employees are prohibited from seeking employment with a regulated utility while employed by the Commission
- Commission employees are prohibited from owning stock in a Missouri regulated utility

Initiation of Audits

- Who initiates the audit process at the Missouri Commission?
 - The Commission may initiate a review of a utility's records or operations for any reason
 - However, usually the audit process in Missouri is set in motion by the actions of the utility itself, by filing of a general rate increase request

Initiation of Audits

- In Missouri, utilities have the burden of justifying that any proposed change in their customer rates is reasonable
- As part of that burden, the Commission routinely requires that its Staff conduct a thorough review of a utility's existing cost structure to determine whether the utility's prudent and reasonable cost of service exceeds the level reflected in its current rates
- “Thorough review” – Rate Audit

Initiation of Audits

- Other parties to rate proceedings may also conduct audits of utilities seeking rate changes
- These other parties always include the Office of Public Counsel (consumer advocate), and may include large industrial or commercial customers, and other parties
- Audits conducted by other parties are usually not as thorough as those conducted by Staff

Audit Confidentiality

- No information obtained through the rate audit process that is not otherwise publicly available can be disclosed to the public without approval of the utility, unless directed by the Commission
- Utilities have a legitimate need to restrict certain information regarding their operations from public scrutiny

Audit Confidentiality

- Some utility information is routinely made available to the public in other forums, and thus cannot be considered confidential in the context of rate proceedings
- This includes:
 - All information in published financial statements
 - Salaries and benefits of top utility executives
 - Other information made public in periodic Securities and Exchange Commission filings by utilities

Audit Confidentiality

- Some utility information is not routinely disclosed to the public, and can not be made public by auditors without utility permission
- This usually includes:
 - Salary and benefit information for most utility employees
 - Cost data associated with smaller construction projects

Audit Confidentiality

- The Missouri Commission has procedures by which certain types of key information can be made available to the Commission and parties within rate cases, without also becoming open to the general public

Audit Confidentiality

- Utilities can designate certain information as being “*highly confidential*” or “*proprietary*”
- These designations can be challenged by another party
- The Commission makes the final decisions on audit data confidentiality disputes

Audit Confidentiality

- No testimony or reports can be filed containing material designated as being highly confidential or proprietary unless a “protective order” is issued first
- The information covered by a protective order is protected from public access through a “redaction” process
- This means that material submitted to the Commission under a protective order is filed in separate “public” (redacted) versions and confidential (complete) versions

Audit Confidentiality

- Highly Confidential Information:
 - Information concerning specific customers
 - Employee-sensitive information
 - Information on competitive service offerings by utilities
 - Strategies for contract negotiations

Audit Confidentiality

- Proprietary Information:
 - Trade secrets
 - Private technical, financial and business information

Audit Confidentiality

- In evidentiary hearings, any discussion of highly confidential or proprietary matters are held in “in-camera” sessions
- In these sessions, members of the general public must leave the hearing room; and no broadcast of the session is made over the internet

Audit Confidentiality

- Some information is protected from any disclosure to the Commission, parties to rate proceedings, or the general public
- For example:
 - Attorney/client privilege materials
 - External auditor/client privilege materials

Audit Confidentiality

- Commission employees are subject to disciplinary action, including termination, if they disclose confidential information obtained from utilities to the press or general public

Funding of Audits

- The costs of all Commission activities, including rate audits, are recovered from special assessments charged to utility companies
- In turn, these charges are included in the utility's rate levels and recovered from utility customers

Funding of Audits

The embedded cost of Commission employees involved in specific audit activities (labor, benefits) are recovered through the Commission assessment

The incremental costs associated with audits (hotel, meals, overtime, etc.) are also recovered through the assessment

Funding of Audits

- The amount of assessment charged to a utility undergoing an audit in a particular year would be influenced by the existence of the audit, but there is not usually any “direct charging” of audit costs to a utility
 - There is one exception to this

Funding of Audits

- If a utility operates in more than one state jurisdiction, its headquarters and its books and records may be located outside of Missouri
- In those circumstances, the utility undergoing the audit has a choice of paying directly for the out-of-state travel associated with the audit, or having its books and records moved to Missouri as necessary for the duration of the audit

Funding of Audits

- In recent years, most out-of-state utilities have opted to move their books to Missouri for audit purposes

Funding of Audits

- In general, the availability of computers in recent years and the resulting capability to work “remotely” from the utility site has substantially reduced the amount of travel associated with utility audits, thus reducing the incremental costs associated with the audits

Funding of Audits

- Each Commission employee is required to charge their work time each day to assigned projects
- These project assignments include rate case audits
- These time assignments allow the Commission to know how much Staff time is devoted to each project on an ongoing basis, as well as on an industry level (electric, gas, water)

Funding of Utility Audits

- In recent years, there have been 400 to 650 official cases/applications filed with the Missouri Commission on an annual basis
- These cases all have specific “docket numbers,” such as *Case No. GR-2014-0152*
- In addition, there are numerous non-docketed assignments each Staff employee may be assigned to

Other Types of Utility Audits

- Public Financial Audits
 - Required to be conducted annually for all “publicly held” companies (i.e., companies that issue stock that can be sold to the general public)
 - All of the larger utilities in Missouri are publicly held

Other Types of Utility Audits

- Public Financial Audits
 - Almost all of the large utility financial audits are handled by one of the “big five” public accounting firms
 - The goal of these audits in general is to attest to the fairness/accuracy of the Company’s financial records

Other Types of Utility Audits

- Public Financial Audits
 - The auditors will assess whether the client company booked its financial results in accordance with “generally accepted accounting principles,” or other applicable guidance from the Securities and Exchange Commission

Other Types of Utility Audits

- Public Financial Audits
 - If no material deficiencies found, the public auditors will issue a “clean” opinion regarding the Company
 - “In our opinion, the financial statements of XYZ Corporation are presented fairly, in all material respects, and the results of its operations for the twelve-month period ending 12/31/xx are in conformity with accounting principles generally accepted in the United States”

Other Types of Utility Audits

- Public Financial Audits
 - Any connection to Commission rate audits?
 - A standard audit step is for the Missouri auditors to review the audit results and workpapers from the most recent financial audit of the utility
 - Those audit documents can give Commission auditors greater insight into major operational and financial decisions made by the utility in the year covered

Other Types of Utility Audits

- Public Financial Audits
 - However, the audit findings from public financial audits often have only limited usefulness to Missouri auditors
 - Public audits focus on verification of past financial results, while Missouri rate audits focus on determining a utility's cost of service using only the most current information

Other Types of Utility Audits

- Public Financial Audits
 - Public auditors often employ very high materiality thresholds; for example, they may not propose an audit adjustment even if the value of the adjustment is in the millions of dollars
 - The materiality thresholds in rate case audits are much lower

Other Types of Utility Audits

- FERC Utility Audits
 - “FERC” is Federal Energy Regulatory Commission
 - FERC regulates the wholesale generation and transmission functions of electric and gas utilities; i.e., “off-system sales,” purchased power transactions, etc.
 - In general, FERC regulates most utility transactions that cross state border lines

Other Types of Utility Audits

- FERC Audits
 - FERC typically sets the wholesale rates of utilities using a “formula” ratemaking approach
 - Formula ratemaking adjusts a utility’s rates annually based on its latest actual financial results
 - This is a much-less detailed oriented approach to setting rates than is currently used in Missouri
 - The Missouri Commission can participate in formula rate proceedings at FERC

Other Types of Utility Audits

- FERC Audits
 - FERC also does periodic compliance audits of utilities
 - Within these audits, FERC seeks to verify that utilities comply with all FERC requirements and procedures, including the accounting requirements of the USOAs
 - The Missouri Commission has been invited to jointly participate in these audits; it has not done so in recent years.

Other Types of Utility Audits

- Other Public Utility Commission Audits
 - Many utilities operate in more than one state, and as a result are regulated by more than one public utility commission
 - As an example, Kansas City Power & Light Company operates in the states of both Missouri and Kansas, and is rate regulated by both the Missouri and Kansas Commissions

Other Types of Utility Audits

- Other Public Utility Commission Audits
 - In these situations, utilities will have two or more different rate levels it can charge its customers based upon which state the customer is located in
 - Would it make sense for two or more Commissions to regulated common utilities in a cooperative fashion; i.e., perform joint rate audits or even seek to authorize identical rate levels?

Other Types of Utility Audits

- Other PUC Audits
 - This may make some sense in concept, but it does not happen in practice
 - One practical concern: different Commissions may not handle common issues in the same manner
 - Most public utility commissions will not want to cede any level of authority to another commission over the operations of utilities in their state

Other Types of Utility Audits

- Internal Audits
 - Most utilities directly employ auditors to perform periodic reviews of key functions or operations of the companies
 - The results of these audits will be reported to the utilities' upper management

Other Types of Utility Audits

- Internal Audits
 - Although internal auditors can do valuable work, their work product is generally of limited usefulness to Commission auditors
 - Fundamentally, internal auditors are not *independent*, and cannot be relied upon to a great extent
 - There is the risk that direct or indirect pressure may be placed on internal auditors to not ask certain questions, or to not review certain areas

Missouri Commission Audits

- Earnings Sharing Audits
 - Two utilities, Ameren Missouri (electric) and Southwestern Bell Telephone (telecommunications) were allowed earnings sharing mechanisms in the 1990s
 - Both utilities had a history of consistent over-earnings at the time

Missouri Commission Audits

- Earnings Sharing Audits
 - Both companies agreed to mechanisms under which if their annual earnings for a year exceeded certain levels, they would credit back to customers a certain percentage of the excess earnings
 - If the companies earnings were below certain levels, the utilities were free to file for rate increases

Missouri Commission Audits

- Earnings Sharing Audits
 - If the companies' earnings were between the “sharing threshold” and the “rate case filing threshold,” they were not required to refund any earnings, and they could not file for a rate increase
 - Because the companies' annual earnings results could result in customer credits, an audit was required to verify that the annual earnings amounts were stated properly

Missouri Commission Audits

- Earnings Sharing Audits
 - Some effort was made to define in advance what kind of regulatory adjustments were appropriate to apply to actual earnings results within the earnings sharing plans for purposes of determining customer refund levels
 - Nonetheless, in both earnings sharing plans significant controversy arose regarding calculation of adjusted earnings, and the resulting level of customer refunds

Missouri Commission Audits

- Earnings Sharing Audits
 - Ultimately, the Commission had to conduct hearings under both plans regarding refund quantification issues
 - Since “regulatory streamlining” was one of the anticipated benefits of this type of plan, the continuing need for active Commission involvement in the plans undercut one of the perceived rationales for this type of regulation

Missouri Commission Audits

- Earnings Sharing Audits
 - Neither Ameren Missouri or Southwestern Bell sought a continuation of the sharing plans once their initial term expired
 - No plan of this type is currently in operation in Missouri
 - Most large utilities in Missouri have increasing costs of service, and have filed for rate increases at least every two to three years

Missouri Commission Audits

- Construction Audits
 - There are targeted financial and managerial audits of large utility construction projects
 - I will discuss these reviews in more detail in the context of rate case audits

Missouri Commission Audits

- Management Audits
 - These are audits/reviews of the quality of utility company management
 - These typically concern “customer service” and “quality of service” issues
 - These audits are not generally focused on rate or financial issues

Missouri Commission Audits

- Management Audits
- Typical concerns:
 - How easy is it for customers to contact the utility, and talk to a live utility representative, if they experience a service issue or billing problem?
 - How many electric outages do a utility's customers experience over time compared to customers of other regional utilities?
 - What is the average duration of electric outages for the utility (in other words, how quickly can the company fix the outage on average)?

Missouri Commission Audits

- Management Audits
 - These audits used to be performed separately from rate case audits.
 - Recently, it is more common for these reviews to be done concurrently with rate case audits
 - Most of the Commission's resources in this area have been focused on water and sewer utilities, which tend to be smaller and less sophisticated than electric and gas utilities

Missouri Commission Audits

- Management Audits
 - There is an increased priority given to management reviews of utilities that have undergone recent ownership changes (i.e., sale or merger)
 - The new owners of a utility have an incentive to attempt to finance the purchase price of the company through expense reductions, which in turn may lead to degraded customer service

Missouri Commission Audits

- Single-Issue Audits
 - In Missouri, these audits can cover the following:
 - Electric fuel and purchased power expenses
 - Purchased gas for natural gas utilities
 - Infrastructure replacement costs for gas and water utilities
 - Renewable energy costs (wind, solar, etc.)
 - Demand-side management costs
 - Environmental costs (electric and water)
 - Nuclear plant decommissioning costs

Missouri Commission Audits

- Single-Issue Audits
 - The Missouri Legislature must authorize single-issue ratemaking mechanisms
 - In general, the process for implementing single-issue rate changes is streamlined, so that prudence reviews of the associated costs must be made sometime after the costs are included in rates
 - Any amounts later found to be imprudent are to be credited to customers with interest

Missouri Commission Audits

- Single-Issue Audits
 - Widespread use of single-issue rate mechanisms can lead to customer bills not reflecting a utility's actual cost of service over time, so companies taking advantage of these mechanisms are required to file general rate proceedings every three to four years

Missouri Commission Audits

- Single-Issue Audits
 - Utilities taking advantage of single-issue rate mechanisms must also make quarterly reports of their current earnings situation
 - This process is called “earnings surveillance,” and is more detailed than the financial information the utility releases to the public every quarter

Missouri Commission Audits

- Single-Issue Audits
 - Actual earned return on equity and rate of return percentages are computed each quarter as part of the required surveillance process
 - The purpose of the surveillance process is to allow an ongoing examination of the utility's actual earnings over time, so that parties can consider taking action if the utility appears to be over-earning at the same time it is taking advantage of single-issue rate mechanisms

Missouri Commission Audits

- Single-Issue Audits
 - However, the fact that a utility may show excessive earnings in their reported surveillance results does not necessarily indicate that a full rate case audit would produce a similar result
 - It is necessary to do a full audit of a utility, including consideration of adjustments to actual revenues/expenses/rate base, to determine if the utility's rates should be reduced

Missouri Commission Audits

- Single-Issue Audits
 - A utility would have to show a sustained period of material over-earnings before the Staff would initiate an earnings complaint rate audit
 - In general, Missouri electric and gas utilities have had an increasing cost of service for a decade or more

Missouri Commission Audits

- Fuel Adjustment Clause Audits
 - These single-issue rate mechanisms were authorized by the Missouri Legislature around ten years ago
 - At the time, electric utilities faced rapidly increasing and volatile levels of fuel expense, mostly associated with natural gas prices

Missouri Commission Audits

- Fuel Adjustment Clause Audits
 - Electric utilities can pass on 95% of changes to their fuel and purchased power expenses to customers twice a year
 - The change to expenses must be offset by any changes to the utility's proceeds from off-system sales
 - Prudence audits of costs passed through the FAC must be conducted no less than every 18 months; this is an after-the-fact review

Missouri Commission Audits

- Fuel Adjustment Clause Audits
 - Within the prudence audit process, auditors have six-month period to file report with their findings and any proposed prudence adjustments
 - FACs have only been in place for Missouri electric utilities since 2007
 - Commission Staff has recommended two major prudence adjustments since that time

Missouri Commission Audits

- Fuel Adjustment Clause Audits
 - One adjustment was to properly net certain off-system sales proceeds against increased fuel/purchased power costs for a utility
 - The other adjustment raised concerns regarding the “hedging” or risk management practices of an electric utility regarding its natural gas purchases

Missouri Commission Audits

- Purchased Gas Adjustment Audits
 - Since the early 1960s, gas utilities have been allowed to pass on to customers changes in their cost of procuring natural gas for their end customers twice a year
 - Because natural gas costs typically make up much more than half of a gas utility's total costs, it was believed that use of a single-issue rate mechanism was necessary to avoid possible financial harm to utilities due to sudden volatility in the cost of gas

Missouri Commission Audits

- Purchased Gas Adjustment Audits
 - Utilities are allowed to charge their customers the estimated cost of their gas purchases for a period of time
 - These estimates are later “trued-up” to actual values

Missouri Commission Audits

- Purchased Gas Adjustment Audits
 - Prudence audits are performed for each gas utility at least once a year
 - Again, this is a retrospective analysis
 - Issues that have been raised in the past in the context of these audits have mostly involved the prudence of utilities' purchases of gas from affiliated gas suppliers

Missouri Commission Audits

- Infrastructure Replacement Surcharge Audits
 - Since 2003, gas and water utilities have been allowed to pass through to customers the additional depreciation expense, return and property taxes associated with certain qualifying plant additions
 - In general, to qualify these plant additions must be made to protect or enhance customer safety, to replace aging infrastructure, or result from governmental mandates (“relocations”).

Missouri Commission Audits

- Infrastructure Replacement Surcharge Audits
 - These charges can be passed on to customers twice a year, but each separate application must involve a minimum of a \$1 million rate impact
 - The infrastructure replacement surcharge cannot exceed more than 10% of a customer's bill in total
 - Commission Staff has 60 days to audit the request and issue a report

Missouri Commission Audits

- Infrastructure Replacement Surcharge Audits
 - Staff audits of these rate increase applications focus on verification that the plant addition costs included in the request actually qualify for special rate treatment
 - Any prudence issues associated with the plant projects are examined in the utility's next general rate proceeding

Missouri Commission Audits

- Renewable Energy Standard Audits
 - Per Missouri law, Missouri electric utilities must generate or procure a minimum percentage of their power from renewable sources in the following steps: 2% in 2011, 5% in 2014, 10% in 2018 and 15% in 2021
 - However, the additional cost impact on customers of the renewable standards is currently limited to an average 1% increase over ten years

Missouri Commission Audits

- Renewable Energy Standard Audits
 - Utilities are allowed to seek single-issue rate increases associated with the cost impacts of the renewable energy standard requirements
 - Prudence audits of RES costs are required periodically (no set interval)
 - No utility has sought single-issue rate treatment of these costs to date; therefore, no prudence reviews have taken place

Missouri Commission Audits

- Demand-Side Management Audits
 - Per Missouri law, electric utilities are encouraged to implement demand-side programs to reduce their load and peak demand over time
 - Missouri electric utilities can propose single-issue rate recovery of the financial impacts resulting from the DSM programs approved by the Commission

Missouri Commission Audits

- Demand-Side Management Audits
 - These single-issue ratemaking mechanisms can be used to allow utilities to recover the costs of offering DSM programs, to be reimbursed for the lost revenues they incur associated with the programs, and to receive a “performance incentive mechanism” bonus if certain load reduction targets are met

Missouri Commission Audits

- Demand-Side Management Audits
 - Prudence audits of DSM-related amounts recovered through single-issue rate mechanisms are required no less often than every 24 months
 - To date, no electric utility has sought single-issue rate treatment of these costs

Missouri Commission Audits

- Environmental Adjustment Audits
 - The need to make environmental improvements to existing plant facilities is currently a major factor driving increased electric rates in Missouri
 - Per state law, electric utilities can seek single-issue rate treatment of certain qualifying environmental capital and operating expenditures
 - The Commission's rule promulgating single-issue rate treatment of these costs has been tied up in the court system and not implemented to date

Missouri Commission Audits

- Nuclear Plant Decommissioning Audits
 - The need to dismantle nuclear generating units at the end of their lives and restore the plant site to its original condition is a health and safety concern
 - For this reason, state law allows electric utilities to obtain single-issue rate treatment of changes in their nuclear plant decommissioning expense

Missouri Commission Audits

- Nuclear Plant Decommissioning Audits
 - This expense is collected in advance from customers and placed in a trust fund by the utility to use at a later time when the nuclear plants are decommissioned
 - These rate changes have been implemented since the 1980s and are largely noncontroversial

Missouri Commission Audits

- Other Audits – “Troubled Utilities”
 - Some small water and sewer utilities are under-capitalized and face sizeable future environmental regulation and clean-up liabilities
 - For a variety of reasons, some of these companies have not sought a change in rates for years

Missouri Commission Audits

- Other Audits – “Troubled Utilities”
 - If it becomes apparent that a utility may have significant future operational and financial viability concerns, Commission Staff can perform a thorough overall review of the utility’s operations
 - Among other goals, this review will investigate whether the utility’s rates need to be changed (increased), in order to provide the utility more resources to operate safely and provide adequate customer service

Missouri Commission Audits

- Other Audits – Fraud and Criminal Activity
 - These are very rare
 - Ten years ago, allegations were made that organized crime figures were secretly managing a small telephone utility in Missouri
 - The Commission ordered a complete audit be made of the Company, including its rate levels

Missouri Commission Audits

- Other Audits – Fraud and Criminal Activity
 - Staff's audit revealed that the Company was booking non-existent expenses in order to qualify for increased revenue flows from the federal government (the “universal service fund”)
 - As a result of the Staff's investigation, the Company's rates were reduced, a million dollar fine was paid, and a sale of the company to new ownership took place

Missouri Commission Audits

- Other Audits – Fraud and Criminal Activity
 - The owner/operator of the telephone company was convicted of several crimes and imprisoned
 - Several organized crime figures from New York City were also convicted and imprisoned on related offences

Missouri Rate Audits

- Audit Planning/Utility Rate Application
 - No less than 60 days prior to filing an application to change its rates, a Missouri utility must make a preliminary filing with the Commission providing notice of the future rate increase request
 - This alerts the Staff of the impending rate case, and allows it to begin to make staffing plans
 - Early notice also allows potential rate case parties to consider possible intervention in the rate case

Missouri Rate Audits

- Audit Planning/Utility Rate Application
 - Frequently, the utility planning the rate increase case will have one or more meetings beforehand with the Staff and/or other interested parties to explain the reasons for the rate increase in detail, and sometimes to seek feedback on the content of the rate case filing

Missouri Rate Audits

- Audit Planning/Utility Rate Application
 - When the utility makes its actual application to change rates, its filing includes:
 - Written testimony from a number of witnesses describing the need for the proposed rate change;
 - A calculation of the rate change, supported by numerous accounting schedules
 - Provision of detailed workpapers supporting the rate change request to the Staff and other case participants

Missouri Rate Audits

- Audit Planning/Audit Assignments
 - The Commission's procedures require that decisions be made quickly concerning the assignment of Staff members to work on the audit
 - For a large utility, the total number of assigned Staff members may exceed 30 employees

Missouri Rate Audits

- Audit Planning/Audit Assignments
 - On large utility rate cases, Staff will be assigned from the following groups:
 - Auditing (revenue requirement determination)
 - Financial Analysis (rate of return)
 - Depreciation (depreciation rates)
 - Management Services (quality of management)
 - Energy Engineering Analysis (fuel expense)
 - Rate Design/Tariffs (rate design and tariff review)
 - Staff Counsel (legal review and support)

Missouri Rate Audits

- Audit Planning/Audit Assignments
 - To determine how many people should be assigned from Staff, and the required level of their experience, it is crucial to identify the most the most important issues raised in a rate case in terms of policy impacts and monetary magnitude in an early stage of the process

Missouri Rate Audits

- Audit Planning/Audit Assignments
 - While the utility will usually outline the major cost factors driving the rate increase in its testimony, it is not always in its interest to highlight them
 - Therefore, Staff performs standard financial analyses in every rate case to attempt to make its own independent investigation of the primary financial causes of the rate increase filing

Missouri Rate Audits

- Audit Planning/Audit Assignments
 - These analyses include a review on an account by account basis of the cost levels used by the utility to justify the rate increase request, and a comparison of those amounts to the cost levels in the applicant's last rate case
 - Staff also typically performs a comparison on an account by account basis of the utility's costs used in the current rate case to the company's totals for the prior three to five years (to identify trends in the data)

Missouri Rate Audits

- Audit Planning/Audit Assignments
 - These comparative analyses should indicate the biggest financial drivers for the proposed rate increase
 - These drivers may be increased expenses, increased rate base, increased rate of return requirement, or declining revenues.
 - The largest dollar drivers of a rate case request should have relatively greater audit attention afforded them

Missouri Rate Audits

- Audit Planning/Audit Programs
 - Many types of audits, particularly public financial audits, are conducted with the use of *audit plans* or *audit programs*
 - Audit plans/programs are detailed documents laying out the audit steps and procedures to be carried out in the audit
 - Missouri Staff does not use audit plans/programs of the type seen in financial audits

Missouri Rate Audits

- Audit Planning/Audit Programs
 - Audit programs are typically used based a belief that audits of the same company or same types of companies will be largely identical from audit to audit
 - In other words, the same areas and potential issues will have to be addressed with largely the same audit actions in every case

Missouri Rate Audits

- Audit Planning/Audit Programs
 - In contrast, the main drivers of a rate increase request from one utility may be completely different from one case to the next
 - An area demanding a great deal of attention in one rate audit may require significantly less attention in the next audit

Missouri Rate Audits

- Audit Planning/Audit Programs
 - Rate case “drivers” may include changes in:
 - Payroll expense (number of employees or wage rates)
 - Pension and medical expense
 - Plant (large additions)
 - Income tax expense rules or rates
 - Property tax expense
 - Debt (amount of debt or debt rates)
 - Equity (amount of equity or required return)
 - Customer numbers
 - Customer usage of utility service

Missouri Rate Audits

- Audit Planning/Audit Programs
 - Staff also believes that use of pre-set audit programs is not a good idea because they encourage “rigid” audits; they not encourage creativity in thought or approach in conducting the audit
 - Finally, Staff is hesitant to use audit plans in rate cases because the plans would be “discoverable” by the utility and other parties

Missouri Rate Audits

- Audit Planning/Risk Assessment
 - The term “risk assessment” refers to an attempt to ensure that the audit fulfills its core goals
 - For public financial audits, the primary risk is that the auditors will not examine a sufficient percentage of the large dollar financial transactions of the entity to be able to express a reliable opinion as to the accuracy of its financial results

Missouri Rate Audits

- Audit Planning/Risk Assessment
 - For a rate audit, the primary risk is that the major drivers of the rate increase will not be adequately examined in the audit, and that those higher costs will be passed on to customers without sufficient review of their prudence and reasonableness
 - The Staff has taken recent steps to improve its issue identification and risk assessment documentation

Missouri Rate Audits

- Audit Planning/Risk Assessment
 - Soon after a utility formally applies for a rate increase, the Staff *case management team* prepares a “case management memo”
 - The case management team are senior members of the Auditing Unit (revenue requirement) and the Electric or Gas Unit (engineering and economic analysis, rate design), and the lead attorney assigned to the audit

Missouri Rate Audits

- Audit Planning/Risk Assessment
 - The Case Management Memo sets out the fundamental guiding principles for the preparation and presentation of Staff's audit recommendations.
 - The Case Management Memo contains a list of assigned Staff members and their specific audit assignments, and an assessment of the most likely issues to go to hearing in the case

Missouri Rate Audits

- Audit Planning/Risk Assessment
 - Each assigned Staff member is to prepare “Issue Summary” documents for every audit area they are assigned
 - These are prepared early in the audit, before the bulk of the audit takes place
 - The issue summaries contain a technical discussion of each issue, the material facts on which the Staff position may turn, and the controlling legal standard for the issue

Missouri Rate Audits

- Audit Planning/Risk Assessment
 - The proposed Staff position in the Issue Summary documents is preliminary only, based in part on any past precedent on the issue and Staff's initial assessment of the likely evidence
 - The position taken by Staff on any issue as expressed in the Issue Summaries is subject to change based upon Staff's actual audit investigation

Missouri Rate Audits

- Audit Planning/Test Year
 - A crucial rate case planning task is selection of a “test year” for audit purposes
 - A test year is 12 consecutive months of historical financial information
 - A test year provides a common starting point for all parties’ analysis of the utility cost levels allegedly causing the need for the rate change

Missouri Rate Audits

- Audit Planning/Test Year
 - The utility seeking a rate change will propose use of a specific test year as part of its application, and base its rate request on that test year
 - The Staff and other parties may accept that test year or propose a new (and generally more updated) test year
 - If there is a disagreement among the parties as to the appropriate test year, the Commission will make the final decision

Missouri Rate Audits

- Audit Planning/Test Year
 - The test years selected for rate audits generally allow for 12 months of actual financial data to be subject to review during the entirety of the audit
 - However, it can take up to 11 months for the Commission to issue a decision on a rate increase request from the point that the utility makes the request

Missouri Rate Audits

- Audit Planning/Test Year
 - “Operation-of-Law Date” – the date, approximately eleven months following the utility’s formal rate increase application, by which the Commission must make a decision on the rate request
 - “Regulatory Lag” – the passage of time between when a utility incurs a change in its cost of service and the point when that change can be reflected in the utility’s general rate levels

Missouri Rate Audits

- Audit Planning/Test Year
 - To minimize regulatory lag, the Commission commonly allows use of “update periods” in setting rates
 - The update period is generally three to six months immediately following the end of the ordered test year
 - Actual financial data for the update period may not be available for the entirety of the audit, but will be available in time to be incorporated into the parties’ rate recommendations

Missouri Rate Audits

- Audit Planning/Test Year
 - Only the most significant cost of service items are measured through the end of the update period, such as:
 - Revenues (customer growth)
 - Salaries/wages/employee numbers
 - Plant in service and most rate base components
 - Depreciation expense
 - Fuel and purchased power expense (electric)

Missouri Rate Audits

- Audit Planning/Test Year
 - Parties can propose “isolated adjustments” to revenues/expenses/rate base beyond the end of the update period that are not matched in time with other elements of cost of service
 - Use of isolated adjustments in setting rates would appear to violate the matching principle

Missouri Rate Audits

- Audit Planning/Test Year
 - The Commission has allowed use of isolated adjustments to set utility rates if:
 - The underlying event is known and measurable
 - Inclusion of the isolated adjustment in rates would not disturb the utility's revenue/expense/rate base relationship

Missouri Rate Audits

- Audit Planning/Test Year
 - Isolated adjustments previously accepted by the Commission have usually fallen in the following two categories:
 - Governmentally mandated costs, such as postage increases
 - Labor union contractual wage increases

Missouri Rate Audits

- Audit Planning/Test Year
 - “True-ups” are limited re-audits of utilities, to allow for inclusion in rates of significant costs that are not incurred until shortly before the new rates are put in effect
 - Use of true-ups is not mandatory, but they are employed in most large rate cases

Missouri Rate Audits

- Audit Planning/Test Year
 - Events that may trigger the need for true-up audits:
 - Large plant additions, such as electric generating units
 - Ongoing construction programs (such as infrastructure replacement)
 - Salary increases

Missouri Rate Audits

- Audit Planning/Test Year
 - If a true-up audit is authorized, the Commission will select a true-up period for which significant cost items will be updated
 - The items to be trued-up will normally be the most significant revenue, expense and rate base items for the utility
 - The true-up period will usually end three to six months prior to the operation-of-law date

Missouri Rate Audits

- Audit Planning/Test Year
 - Example of a typical rate case timeline:
 - End of test year: December 2012
 - Rate case filed: March 2013
 - End of update period: June 2013
 - Staff's rate increase recommendation filed: August 2013
 - End of true-up period: September 2013
 - Rate case hearings: October 2013
 - True-up hearings: December 2013
 - New rates in effect: February 2014

Missouri Rate Audits

- Audit Planning/Test Year
 - Some U.S. state utility commissions use an alternative approach to setting rates, by using a *forecasted or budgeted test year*
 - The aim is to set rates based upon a measurement of the costs a utility is projected to incur during a future period

Missouri Rate Audits

- Audit Planning/Test Year
 - If using a budgeted test year, a utility will base its rate increase request on 12 months of budgeted cost of service data
 - Other parties may propose adjustments to this data
 - There are trade-offs between use of actual and budgeted data to set rates.

Missouri Rate Audits

- Audit Planning/Discovery
 - Probably the most crucial part of rate case audit planning is submission of discovery to the utility
 - “Discovery” means the process of obtaining useful and relevant evidence concerning the utility’s need for a rate increase through the audit process
 - The two primary means of discovery in rate cases are: (1) issuance of data requests, and (2) meetings with utility officials

Missouri Rate Audits

- Audit Planning/Discovery
 - *Data requests* are informal written requests for information transmitted directly to rate case parties, usually the utility
 - The data request document includes:
 - Name of utility official addressed to
 - Date of issuance
 - Requests for documents; or questions to the utility
 - Name of submitting individual
 - Attestation of accuracy

Missouri Rate Audits

- Audit Planning/Discovery
 - May contain a single question, or multiple related questions
 - Answers are not considered to be under oath, but the answers must be sponsored by a person who can attest to the truth and accuracy of the responses
 - Hundreds of data requests may be issued in a large utility rate case

Missouri Rate Audits

- Audit Planning/Discovery
 - Parties must respond to data requests within 20 calendar days, or provide notice within ten days that they will be unable to do so
 - Parties objecting to data requests must file the objection within ten days
 - “Motions to compel” may be filed if parties do not comply with these requirements, or if parties contest objections

Missouri Rate Audits

- Audit Planning/Discovery
 - Data requests can be objected to on grounds of relevance, that the request is overly burdensome, that the information sought is privileged, etc.
 - Before an objection can be challenged before the Commission, the Commission requires that an effort be made to resolve the dispute cooperatively

Missouri Rate Audits

- Audit Planning/Discovery
 - *Discovery conferences* may be ordered by the Commission to aid in resolving significant discovery disputes
 - If all efforts to resolve the discovery dispute fails, the Commission will make a ruling on the disputed data requests

Missouri Rate Audits

- Audit Planning/Discovery
 - *Subpoenas* are formal requests for production of documentary materials from a rate case party
 - The issuance of subpoenas may be challenged before the Commission or in the court system
 - Subpoenas are normally used in rate cases only when a utility or other party will not cooperate with more informal discovery requests

Missouri Rate Audits

- Audit Planning/Discovery
 - Interviews are an informal means to obtain information from utility officials
 - They may be conducted in person or by conference call
 - Oral statements of one party generally cannot be used as evidence by another party in testimony or in a hearing without further corroboration (“hearsay” objection)

Missouri Rate Audits

- Audit Planning/Discovery
 - For that reason, statements made in interviews are sometimes verified through data requests
 - In rare instances, interviews have been transcribed
 - In that event, the meeting participants have a right to review, correct or amend their transcribed statements

Missouri Rate Audits

- Audit Planning/Discovery
 - Depositions are the questioning of witnesses under oath by an attorney to collect evidence/information
 - The deponent's attorney has only limited ability to object to questions
 - Answers can be modified/supplemented after the deposition
 - Depositions can be placed in the evidentiary record of the rate case

Missouri Rate Audits

- Audit Execution/The Audit Process
 - The primary product of rate audits in Missouri are proposed *adjustments* to utility test year data
 - Why should historical test year data be adjusted for purposes of setting rates?
 - Primarily, to convert past historical financial data sets into prospective, forward-looking rate components

Missouri Rate Audits

- Audit Execution/The Audit Process
 - The two types of adjustments intended to convert retrospective, historic financial information into prospective, forward-looking information suitable for setting rates are:
 - Annualization adjustments
 - Normalization adjustments

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Annualization adjustments restate test year revenue and expense data to reflect upward or downward trends observed within the test year and update period
 - Examples include:
 - Salary levels
 - Employee levels
 - Customer numbers

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Example of an annualization adjustment:
 - Test year is 12 months ending December 2013
 - For the first six months of 2013, Employee X is paid a salary of \$4,000 per month
 - For the last six months of 2013, Employee X is paid a salary of \$5,000 per month
 - The utility's test year salary expense for this employee is \$54,000
 - Should this amount be adjusted for rate case purposes?

Missouri Rate Audits

- Audit Execution/The Audit Process
 - In regard to the rate base and rate of return components, the relevant data is “annualized” for rate purposes by using end of period data rather than test year or update period average values
 - An end-of-period analysis is not appropriate if the audit goal is to make a retrospective analysis of prior historical financial results

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Example of prospective versus retrospective audit approach:
 - Test year is 12 months ending December 31, 2013
 - Net income for year is \$10 million
 - Average rate base for the test year is \$100 million
 - End of period rate base is \$120 million
 - Earned rate of return on average rate base = 10.0%
 - Earned rate of return on ending rate base = 8.33%

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Normalization adjustments are made to convert unusually high or low test year values for a cost of service component to a more normal expected ongoing level
 - Some utility expenses can fluctuate widely from year to year

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Examples of cost of service components subject to normalization adjustments include:
 - Weather impacts on revenues and fuel expense
 - Maintenance expenses
 - Bad debt expense

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Example of a normalization adjustment:
 - Test year is the 12 months ending December 2013
 - Maintenance expenses for the test year -\$3 million
 - Maintenance expenses for calendar year 2012 - \$7 million
 - Maintenance expenses for calendar year 2011 - \$ 5 million
 - Should the test year level of maintenance expense be adjusted for rate purposes?

Missouri Rate Audits

- Audit Execution/The Audit Process
 - Another type of adjustment is a *disallowance*
 - Disallowance adjustments are intended to remove certain categories of costs in entirety from inclusion in rates
 - Examples:
 - Political “lobbying” costs
 - “Goodwill” advertising
 - Certain types of incentive compensation expenses

Missouri Rate Audits

- Audit Execution/Internal Control
 - “Tests of control” are an examination of an entity’s internal controls; i.e., the policies and procedures the business entity implements in an attempt to ensure fair and accurate recording of its financial results
 - This is an important area of examination in public financial audits, in particular

Missouri Rate Audits

- Audit Execution/Internal Control
 - For rate case audits, the Commission auditors may perform some tests of internal control, but primarily rely upon the public financial audits in relying upon adequate control of the audited utility
 - From an even broader perspective, Missouri Staff auditors largely rely upon the utility's external auditors for assurance that the Company's books and records are stated fairly

Missouri Rate Audits

- Audit Execution/Sampling
 - “Sampling” is a technique to ensure that an adequate population of financial transactions are examined in an audit on which to base an audit opinion. This sampling may or may not be designed to be “statistically valid”
 - The Missouri Commission may use sampling in an informal manner in its audits (i.e., to ensure that the largest value test year transactions in a given account are reviewed)

Missouri Rate Audits

- Audit Execution/Sampling
 - Rarely are the Staff's sampling activities in an audit designed to be statistically valid
 - The Staff need for sampling in an audit is limited because the Staff's annualization and normalization approaches are not usually based upon an in-depth review of individual financial transactions

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Payroll expenses are always reviewed carefully in Staff rate case audits
 - Most utilities employ sizeable workforces, and salaries and benefits are usually one of the largest, if not the largest, category of expense incurred by a utility

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - The prudence of a utility's decisions on the salary levels it pays its employees should always be examined, to ensure that utility payroll cost is comparable to the payroll expense of competitive companies subject to market discipline
 - Most utilities participate in salary surveys, which compare wage rates of similar companies in the region (both utilities and non-regulated companies) to their own salary levels

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Union wages and benefits are subject to contract negotiations
 - By Missouri law, the Commission is not allowed to consider certain adjustments to union wage and benefit levels

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - One area of payroll of high dollar magnitude and great public interest is the amount of salaries and benefits paid out to utility executives
 - The total amount of annual salaries and benefits awarded to a utility's chief executive officer may be well in excess of a million dollars
 - This area is always reviewed to ensure that the utility does not overpay its executives in relation to their company's performance, the size of the company or the region in which it operates

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Pension expense is another area that warrants a prudence examination
 - In the past, most U.S corporations, including utilities, provided their employees with “defined benefit” pension plans
 - Under defined benefit plans, employees are provided with a preset future pension benefit, and it is up to the company to ensure the resources are available to make the payments to retirees when they are due

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Many non-regulated companies are moving towards offering employees “defined contribution” pension plans
 - Under this type of plan, the company commits to make a set amount of contribution towards the employees’ pensions each year
 - The actual pension benefit to be paid to employees in the future is dependent upon the return earned by pension fund assets

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Defined contribution plans are more risky to employees than defined benefit plans
 - Utilities have been slower to transition toward defined contribution plans than non-regulated companies
 - Utility employees and utility ratepayers may have differing perspectives on pension prudence issues

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Medical benefits are offered by most large utility companies to active employees and retirees
 - These costs have been escalating rapidly in recent years
 - The actions of the utility to restrain these costs should be examined in a rate case audit

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Fuel/purchased power expense is a large and complex cost of service item examined in electric rate cases
 - Fuel expense can consist of some combination of the cost of:
 - Running coal generating plants
 - Running natural gas generating plants
 - Running nuclear generating plants

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Fuel expense can consist of the cost of:
 - Obtaining power from wind or other renewable resources
 - Purchasing power from other utilities to supply electricity to native load customers
 - Rail transportation (for supply of coal)
 - Pipeline transportation (for supply of natural gas)

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Prudence questions that should be investigated:
 - Is the utility purchasing power to serve its native load when that course of action is less expensive than supplying power from its own generation?
 - Is the utility negotiating reasonable contracts for the future supply of coal, natural gas or wind, as well as transportation of coal or gas?
 - Does the existence of the fuel adjustment mechanism, which automatically passes on most of any increased fuel expenses to customers, dampen the incentives of the utility to operate in a least-cost fashion in this area?

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Because a utility can choose to obtain its power supply from numerous internal or external sources, Staff utilizes a “fuel model” software program as part of its analysis of fuel expense in a rate case audit
 - A fuel model produces an annual fuel expense output result under simulated “normal” conditions (weather, unit availability, current fuel and transportation cost information)

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Any significant differences between the results of Staff's fuel model outputs and the actual fuel and purchased power expenses incurred by the utility in the test year will be investigated in the rate case audit

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Utilities can recover *bad debt expenses* as part of their rates
 - Bad debt expense, or uncollectibles expense, is the portion of customer bills that the utility fails to receive due to non-payment
 - This is typically 1% or less of utility revenues

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Including bad debt expense in rates effectively means that the vast majority of paying customers will reimburse the utility for the small percentage of customers who will not pay their bills
 - For this reason, it is important that this area be scrutinized in every rate case to make sure the utility is making reasonable efforts to maximize its collection of billed amounts from customers

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Rate base (capital) items are examined for prudence in a rate case audit as well
 - The largest single component of rate base is plant in service
 - The value of plant in service largely consists of the cost of the labor, materials, contractor costs and interest costs necessary to construct or install the plant asset

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - State law prohibits inclusion in rate base of plant assets that are not “used and useful;” i.e., the cost of assets under construction is not includable in rate base
 - Checks are made to insure that new plant assets the utility seeks to include in rate base are actually “in-service”

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Occasionally, electric utilities will add very expensive assets to their rate base
 - New coal fired generating units can cost two billion dollars
 - The nuclear units added to the electric utilities' generating fleet in the 1980s cost approximately three billion dollars

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - For large dollar construction projects, the Missouri Commission has conducted “*construction audits*”
 - These audits attempt to determine whether these construction projects were reasonably managed by the constructing utilities to minimize long-term costs to their customers
 - These reviews typically begin prior to the rate case in which the utility seeks to include the project in its rate base

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - The starting point of most construction audits is the project budget that reflects reasonably complete design and engineering specifications for the unit
 - This budget amount is sometimes known as the “*definitive estimate*”
 - Any “*cost overruns*” above that total budget amount will be examined in the construction audit, with the utility expected to explain and justify the prudence of the budget overrun

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Generally, many different contractors may be used in major construction projects.
 - The process by which the contractors are chosen, and then managed on an ongoing basis is a focus of construction audits
 - The utility may choose to manage the project themselves, or hire an experienced construction management company to perform that task

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Even if the utility hires another entity to “manage the project,” the utility cannot delegate away responsibility for the major decisions involving the project
 - Given that utility companies are not considered to be necessarily expert at managing large construction projects, a decision to retain that responsibility should also be examined

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Schedule delays can be very costly to a construction project; and result in both increased labor costs (higher levels of overtime) and increased financing costs
 - Schedule delays can occur due to uncontrollable factors (unusual weather), or due to reasons arguably within the control of management
 - The reason for any delays, and the resulting cost impacts, is a major focus in construction audits

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - In every rate case, Staff will examine the adequacy of a utility's authorized depreciation rates, which are used to determine its ongoing level of depreciation expense
 - Depreciation rates can be affected by:
 - Changes in the lives of existing asset types
 - New types of plant assets
 - Changing estimates of future net salvage

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - A utility's rate of return is made up on debt and equity return components (the "*capital structure*")
 - Debt is less expensive than equity as a capital source, but overuse of debt can drive up a utility's financial risk, and hence its required equity return
 - Equity is more expensive than debt, and over-reliance upon equity sources for capital financing needs may lead to customer rates higher than what is required

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - In any rate case audit, the utility's actual capital structure will be examined to determine whether it is "optimal" (low-cost)
 - If the actual capital structure is not low-cost, Staff may recommend that a hypothetical capital structure be used in its place

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - Utilities are allowed to enter into non-regulated business lines
 - If the regulated utility business enters into transactions with non-regulated commonly owned businesses, these are known as “*affiliated transactions*”
 - When present, this is always a focus of a prudence review

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - The Commission has issued rules to govern how utilities should enter into affiliated transactions:
 - The utilities are not allowed to provide services to non-regulated affiliates except at the higher of “cost” or “market”
 - The utilities are not allowed to obtain services from non-regulated affiliates except at the lower of “cost” or “market”

Missouri Rate Audits

- Audit Execution/Standard Audit Areas
 - As both the “cost” and “market” valuations for affiliated transactions can be somewhat subjective measurements, affiliated transactions can be a controversial audit area

Missouri Rate Audits

- Audit Execution/Audit Documentation
 - The major form of audit documentation maintained by assigned Staff during a rate case audit are data request responses and interview notes/minutes
 - As the audit reaches its final stages, the auditors will prepare “workpapers” to support proposed adjustments in each assigned area of the audit

Missouri Rate Audits

- Audit Execution/Audit Documentation
 - Audit workpapers show the calculation of the proposed adjustments, and reference the documentary sources relied upon in formulation of the adjustment
 - These workpapers are presented to one or more members of the case management team prior to the conclusion of the audit for their review and approval

Missouri Rate Audits

- Audit Execution/Audit Documentation
 - The workpapers may be revised if the case management team member is dissatisfied with the proposed calculation of the adjustment or believes more work should be performed to support it

Missouri Rate Audits

- Audit Reporting/Testimony
 - All audit findings, conclusions and recommendation are submitted to the Commission in written form as *filed testimony*
 - In rate cases, Staff can make three separate testimony filings:
 - Direct- present Staff's rate recommendations
 - Rebuttal – attack the utility's or other parties' rate recommendations
 - Surrebuttal – defend Staff's rate recommendations from other parties' rebuttal

Missouri Rate Audits

- Audit Reporting/Testimony
 - All filed testimony is in question and answer format (Q &A), as in a court proceeding
 - Testimony includes
 - Educational and work credentials of the witness
 - Summary of testimony
 - By assigned area, a detailed description and explanation of the audit findings, conclusions and recommendations

Missouri Rate Audits

- Audit Reporting/Testimony
 - The witness may attach any relevant documents supporting the testimony as “schedules”
 - Frequently, data request responses are attached as schedules
 - Some of all of the testimony and schedules may be treated as “proprietary” or “highly confidential”

Missouri Rate Audits

- Audit Reporting/Testimony
 - An affidavit is attached to all pieces of testimony in which the witness swears under oath to the truthfulness of the information within the document

Missouri Rate Audits

- Audit Reporting/Testimony
 - All testimony is thoroughly reviewed before finalization for writing style, grammatical correctness, consistency with other testimony, and consistency with prior Commission precedent
 - This review is performed by each auditor's supervisor(s), at least one member of the case management team, and by the assigned Staff attorney
 - Testimony may be reviewed by Commission Staff upper management

Missouri Rate Audits

- Audit Reporting/Testimony
 - Commission management will review testimony if the positions advocated within the draft are inconsistent with prior Staff positions or Commission rulings; if the testimony deals with a new and significant issue, or if the issue is otherwise unusually controversial or material
 - Commission management has the final say on the content of all filed Staff testimony

Missouri Rate Audits

- Audit Reporting/Testimony
 - All Staff witnesses file testimony in support of **Staff** recommendations and conclusions, and not necessarily their own opinions
 - Staff witnesses do not have freedom to submit their own positions in testimony to the Commission without approval of Staff management
 - It is important that Staff witnesses agree with the position taken in their testimony at least to the extent necessary to successfully defend it in testimony and hearings

Missouri Rate Audits

- Audit Reporting/Testimony
 - If a Staff witness cannot fundamentally agree with a Staff position he or she is expected to defend in testimony and in hearings, the witness should inform Commission management of that fact
 - In that instance, another witness will be found to sponsor the testimony
 - This only occurs rarely

Missouri Rate Audits

- Audit Reporting/Testimony
 - Concurrently with the filing of testimony, Staff witnesses will provide supporting workpapers to the utility and other parties for all adjustments they sponsor
 - These are updated and completed versions of the same workpapers earlier reviewed by Staff audit supervisors

Missouri Rate Audits

- Audit Reporting/Testimony
 - Again, these workpapers will show the detailed calculations and support for the quantification of the adjustments sponsored by Staff
 - Provision of workpapers is essential for the utility or other party to understand and critique the positions and calculations advocated by the Staff in a rate case

Missouri Rate Audits

- Audit Reporting/Evidentiary Hearings
 - After testimony is filed, the parties will attempt to determine whether a voluntary compromise resolution of some or all of the rate case issues can be achieved
 - If a total settlement of the rate case is not possible, the issues that remain are addressed in an evidentiary hearing before the Commission

Missouri Rate Audits

- Audit Reporting/Evidentiary Hearing
 - Each witness will be subject to cross-examination by opposing counsel on all aspects of their filed testimony
 - Each witness may be asked to address questions from the five Commissioners
 - The witness may be asked “redirect” questions by Staff counsel if necessary to shore up Staff’s position

Missouri Rate Audits

- Audit Reporting/Evidentiary Hearing
 - Portions of witnesses' testimony may be objected to by opposing counsel on various grounds, and struck from the evidentiary record if the Commission agrees

Missouri Rate Audits

- Audit Reporting/Evidentiary Hearings
 - After hearings are concluded, each party's attorneys will submit briefs to the Commission summarizing the evidence before the Commission on each issue
 - Based upon the weight of the evidence on each issue, the Commission will decide which party has provided the most persuasive argumentation for their position

Missouri Rate Audits

- Audit Reporting/Evidentiary Hearings
 - The Commission will issue a report and order for each rate case, detailing the evidence they found most compelling in deciding each issue
 - A new set of tariffs will be issued establishing the rates resulting from the Commission's rate case decisions
 - The Commission's report and order is subject to appeal by dissatisfied parties (but not by Staff)

Missouri Rate Audits

- Software
 - The Commission Staff uses relatively little specialized software as part of its audit process
 - The Staff has developed programs to calculate the recommended revenue requirement in each rate case
 - The revenue requirement calculation is developed using twelve separate accounting schedules, which may incorporate hundreds of separate audit adjustments

Missouri Rate Audits

- Software
 - The Staff's accounting schedules include calculations of rate base, plant in service, depreciation reserve, the income statement, adjustments to the income statement, income taxes, rate of return and capital structure, and the overall Staff revenue requirement recommendation

Missouri Rate Audits

- Software
 - The Staff also has developed a program to produce “case reconciliations”
 - Reconciliations break out the dollar differences between each parties’ recommended revenue requirement amount by issue
 - This document offers the Commission information as to how significant each issue is in terms of dollar value

Missouri Rate Audits

- Software
 - The Commission has an “EFIS” accessible document archive system in place to collect relevant documentation for each filed case
 - The collected materials include all orders, testimony filings, hearing transcripts and orders filed in the case
 - All of Staff’s data requests, and the utilities’ responses to them, are also shown on EFIS in numerical order

Missouri Rate Audits

- Software
 - A utility's general ledger is the fundamental source of accounting information used in a rate case audit
 - A general ledger contains, by account, all entries made by a company for a defined period of time
 - In each audit, Staff obtains a company's general ledger for the test year, update period and true-up periods, and usually for earlier periods as well

Missouri Rate Audits

- Software
 - Prior to full utility computerization of their financial reporting systems, Staff obtained paper copies of general ledgers from utilities
 - Now, electronic versions of general ledgers are provided to the Staff by larger utilities in rate audits
 - For a long time, auditors had to rely on utilities for “searches” and “sorts” of general ledger information

Missouri Rate Audits

- Software
 - The Staff's current practice is to ask utilities to provide their general ledgers in Excel format, so that Staff can perform "searches" and "sorts" of the data on their own
 - Soon, all large utilities will be able to supply Staff with general ledger information in searchable Excel format

Missouri Rate Audits

- Software
 - For most audit functions, use of basic Excel spreadsheets is sufficient to present audit information, perform adjustment calculations and analysis, and create workpapers

Missouri Rate Audits

- Software
 - The key to any audit is the ability to ask questions on significant and material factors potentially impacting overall rate levels
 - Software cannot in and of itself guide the auditor in terms of what areas should be reviewed, what priority to give to each potential audit area, and what questions should be asked in each area

Conclusion

- Questions or Comments?