



Missouri Energy Development Association

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Data Center
Missouri Public
Service Commission

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Colleen M. Dale
Secretary of the Commission
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Atmos Energy
Corporation

Empire District
Electric Company

RE: EX-2008-0105 Rulemaking Comments

Great Plains Energy
(KC Power & Light)

Dear Cully:

The Laclede
Group, Inc.

Please find Missouri Energy Development Association's comments in response to the Notice of Proposed Rulemaking published in the Missouri Register on December 3, 2007. These rules implement the Environmental Cost Recovery Mechanism (ECRM) and this rulemaking has been designated Case No. EX-2008-0105.

Missouri
American Water

If you have any questions, please do not hesitate to call me at (573) 634-8678 or by e-mail at Warren@missourienergy.org.

Missouri
Gas Energy

Sincerely,

A handwritten signature in black ink, appearing to read "Warren T. Wood", is written over a large, stylized, and somewhat illegible signature that appears to be "Warren T. Wood".

Warren T. Wood
President

Attachment

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Proposed Rules)	
4 CSR 240-3.162 and)	Case No. EX-2008-0105
4 CSR 240-20.091, Environmental)	
Cost Recovery Mechanisms)	

**COMMENTS OF THE MISSOURI ENERGY DEVELOPMENT
ASSOCIATION d/b/a MEDA**

January 2, 2008

COMES NOW the Missouri Energy Development Association d/b/a MEDA, and for its Comments in response to the Notice of Proposed Rulemaking published in the Missouri Register on December 3, 2007, states as follows:

Through a series of technical workshops the Missouri Public Service Commission (PSC) Staff developed the language currently reflected in these proposed rules. The Missouri Energy Development Association (MEDA) greatly appreciates the PSC holding these technical workshops and believes that this process results in much better rules. This process provides parties an opportunity to discuss areas of concern, draft language to address these concerns, and narrows the scope of disputed issues.

These proposed rules follow implementation of the electric utility fuel adjustment clause (FAC) rules recently implemented by the PSC. In fact, in many respects these ECRM rules are very similar to the FAC rules from which they were modeled. The FAC rules and these ECRM rules are both the result of Senate Bill (SB) 179, passed in the 2005 legislative session.

These ECRM rules are intended to provide for timely recovery of changes in cost associated with mandated environmental retrofits and changes in environmentally-related operating and maintenance costs without the immediate need for a full general rate case. The timing of these rules is appropriate given their purpose and the investment needs of the electric utilities in Missouri. The electric utilities in Missouri are at the beginning of a major infrastructure building period to meet growing demand and to comply with new stricter environmental requirements.

Some of the major generation plant and environmental compliance projects outlined in Securities and Exchange (SEC) filings and other public sources:

Missouri Investor-Owned & Cooperative Utilities Spending Over ~ \$8 Billion In the Next Decade on Generation Plants:

- Cooperatives – New 660 MW Coal Unit (~\$1.7 billion), Recently Completed 580 MW Gas-Fired Plant & Purchasing Power from Wind Farms in North Missouri
- AmerenUE – Recently Purchased 1,490 MW of Gas-Fired Generation, Considering New 1,600 MW Nuclear Unit (~ \$5 billion)
- KCP&L - Iatan II (55% owner) 468 MW (~\$878 million) & Wind Power Additions (~\$164 million)
- Aquila - Iatan II (18% owner) 153 MW (~\$293 million) & Constructing Another Gas-Fired Plant (~\$186 million)
- Empire – Iatan II (12% owner) 100 MW (~\$195 million), Plum Point 50 MW (~\$ 103 million), 50 MW Purchase Contract, Recently Constructed 155 MW Gas-Fired Plant (~\$60 million) & Purchasing Power from Wind Farms in Kansas

Missouri Investor-Owned & Cooperative Utilities Spending Over ~ \$4 Billion In the Next Decade on Environmental Upgrades:

- Cooperatives – Spending Over \$600 Million Adding Air Quality Controls to Existing Plants
- AmerenUE – Spending Approximately \$2 Billion to Comply with Environmental Requirements
- KCP&L – Environmental Work in Compliance with Comprehensive Energy Plan and Environmental Requirements Expected to Cost Over \$1 Billion
- Aquila – Spending Approximately \$215 Million to Comply with Environmental Requirements
- Empire – Iatan I Work (~\$49 million) & Environmental Work at Other Plants Expected to Cost ~\$130 Million

The attached exhibits, listed below, show that electric utilities take numerous steps to reduce their emissions, the electric utility environmental compliance situation is something that investors are aware of, and that the electric utility environmental compliance infrastructure challenge we face is national in scope. The primary driver behind the need for these environmental expenditures is compliance with the Clean Air Interstate Rule (CAIR), Clean Air Mercury Rule (CAMR), and associated particulate regulations.

<u>Exhibit #</u>	<u>Subject</u>
1	<i>How Power Plants Are Reducing Air Emissions</i> , Source: Edison Electric Institute. See the following link: http://www.eei.org/industry_issues/environment/air/mercury/Powerplant_Diagram.pdf
2	<i>Electric Power Generation and TRI</i> , Source: Edison Electric Institute. See the following link: http://www.eei.org/industry_issues/environment/air/Toxics_Release_Inventory/flowchar.pdf
3	<i>Moody's Outlook, U.S. Electric Utilities</i> , Source: Reuters. See the following link: http://uk.reuters.com/article/oilRpt/idUKWNA216920070105
4	<i>From Rising Electricity Costs: A Challenge For Consumers, Regulators, And Utilities</i> , Source: Edison Electric Institute. See the following link: http://www.energy.com/global/documents/utility/industry/EEI_rising_electricity_costs.pdf

The magnitude and timing of these expenditures highlights the need for a reasonable mechanism to allow for recovery of increasing expenditures between rate cases subject to thorough tracking of cost and assessments of prudence. SB 179 was structured to accomplish this in a reasonable manner. SB 179 not only includes reasonable cost recovery mechanisms, it balances these provisions with extensive consumer protections.

SB 179 and these ECRM rules include many consumer protections:

- Rate adjustments under ECRM may not generate more than a 2 ½ % increase in revenues.
- ECRM cannot be in effect for more than 4 years without a general rate case.
- Prudence reviews no less often than every 18 months.
- Extensive application requirements to establish, continue, or modify an ECRM.
- Extensive surveillance monitoring reporting to parties.
- Extensive monthly reporting requirements.
- Annual true-up of actual ECRM charges vs. authorized revenues.
- Customer line-item bill disclosure of ECRM charge.
- Rules also include a number of consumer protections that protect parties' rights to intervene, participate, submit and receive updates to discovery, and file a complaint case if over-earnings are suspected.
- Finally, these rules require that the Commission review the effectiveness of these rules in 2011 and may, if necessary, initiate rulemaking proceedings to revise these rules.

The parties that participated in the technical workshops that resulted in these draft rules have agreed to much of the language in these rules. MEDA does however have a number of suggested changes to these rules that deal primarily with one particular matter that has not been reasonably addressed in these rules. This particular matter is tied to the accounting of depreciation of environmental infrastructure in calculating ECRM adjustments.

As drafted these rules would require parties in rate cases, or the PSC, to divide all rate base of an electric utility into “environmental” and “non-environmental” categories if an ECRM adjustment is to be considered. While this exercise may at first sound reasonable, in application it would be nearly impossible. The list of buildings and equipment owned and operated by electric utilities that have some relation to environmental requirements is long and determining what percentages of facilities and equipment are “environmental” versus “non-environmental” quickly becomes an extremely unwieldy and unreasonable exercise. Specific recommended language to address this matter is given later in these comments.

The PSC faced this depreciation accounting question when it promulgated its Infrastructure System Replacement Surcharge (ISRS) rule. In that rulemaking the PSC chose to account for depreciation offsets of the infrastructure specifically affected by system replacements versus the utility’s total infrastructure depreciation. This treatment was coupled with recognition that the ISRS can only operate for a few years without a general rate case and any party can file a complaint if over-earnings are suspected. These same factors should be recognized in this rulemaking. If the PSC adopts a broad segmentation of all rate base approach the ability of these rules to address the problems for which they were written will be greatly undermined.

MEDA Recommended Rule Language Changes

4 CSR 240-3.162 Electric Utility Environmental Cost Recovery Mechanisms Filing and Submission Requirements

Sections (1)(D) & New (1)(F) – Existing (1)(F) & (1)(G) Become (1)(G) & (1)(H):

(D) Environmental Cost Recovery Mechanism (ECRM) means a mechanism established in a general rate proceeding that allows periodic rate adjustments, outside a general rate proceeding, to reflect the net increases or decreases in an electric utility’s environmental costs **as compared to the electric utility’s base environmental expenses;**

(F) Base environmental expenses means the non-capital environmental costs identified in the general rate proceeding and included in base rates which form the base for future periodic adjustments in the ECRM.

Reasons: These are definitional changes necessary to ensure that the unwieldy and unreasonable exercise of determining an “environmental” and a “non-environmental” rate base is not required. For further discussion, see the reasons listed under (2)(I) and (2)(L), below.

Sections (2)(I) & (2)(L):

(I) A complete explanation of all of the base environmental expenses, ~~both capital and expense~~, incurred to comply with any current federal, state, or local environmental law, regulation or rule that the electric utility is proposing be included in base rates and the specific account used for each base environmental expense item on the electric utility’s books and records;

(L) For each of the major categories of costs, both capital and expense, that the electric utility seeks to recover through its proposed ECRM, a complete explanation of the specific rate class cost allocations and rate design used to calculate the ~~proposed base amount of environmental costs in permanent rates and any subsequent ECRM rate adjustments~~ during the term of the proposed ECRM;

Reasons: These provisions fall under the reporting requirements of electric utilities filing to establish an ECRM in a general rate proceeding. Section (2)(I) contemplates a segmentation of all rate base into “environmental” and “non-environmental,” which as noted, is an extremely unwieldy and unreasonable exercise. As written this would require that all the portions of plant control systems, electrical systems, instrumentation, pumps, fans, piping, and structures installed over many decades and that in any way are necessary to comply environmental requirements would need to be specifically identified in the utility’s books and records. It could even be argued that this provision would require that electric utility building water treatment and sewage system cost that were incurred in compliance with environmental requirements would need to be separately tracked and reported.

The buildings and major equipment owned and operated by electric utilities include many items that are necessary, more or less, to comply with environmental regulations at the federal, state or local level. They range in size from the flue gas desulphurization system on a coal-fired power plant that may cost several hundred million dollars to the small backflow prevention valve on a building’s drinking water system that costs less than one hundred dollars. Another complication is the fact that many electric utility plant systems comply with several different requirements. What this means is that some pumps, piping, fans, ducts, structures and electrical instrumentation and control systems are required in order for the plant to operate and to comply with environmental requirements. Calculating what percentages of all of the systems operated by an electric utility are “environmental” and “non-environmental” would quickly become an extremely unwieldy, contentious, and unreasonable exercise.

Section (2)(H) requires a complete explanation of all the costs that shall be considered for recovery under the proposed ECRM and the specific account used for each cost item on the

electric utility's books and records. The language in section (2)(L) comes back to the idea that all environmental cost must be separately identified by an electric utility seeking an ECRM. The language in section (2)(L) that would remain after MEDA's suggested deletion provides, with the other reporting requirements in section (2), the level of detail that parties will need in a general rate proceeding.

Sections (3)(I) & (3)(L):

(I) A complete explanation of all of the base environmental expenses, ~~both capital and expense~~, incurred to comply with any current federal, state, or local environmental law, regulation or rule that the electric utility is proposing be included in base rates and the specific account used for each base environmental expenses item on the electric utility's books and records;

(L) For each of the major categories of costs, both capital and expense, that the electric utility seeks to recover through its proposed ECRM, a complete explanation of the specific rate class cost allocations and rate design used to calculate the ~~proposed base amount of environmental costs in permanent rates and any subsequent~~ ECRM rate adjustments during the term of the proposed ECRM;

Reasons: These provisions fall under the reporting requirements of electric utilities filing to continue or modify an ECRM established in a general rate proceeding. Because the suggested changes to sections (3)(I) and (3)(L) are identical to the suggested changes to sections (2)(I) and (2)(L), see the reasons given for sections (2)(I) and (2)(L) above.

Section (5)(C) – Original Section (5)(C) is eliminated; remaining Sections of (5) become (5)(C), (D), (E) and (F):

~~(C) The electric utility's actual environmental compliance costs and revenues allocated by rate class and voltage level, as applicable, consistent with the most recent commission approved allocation methods and rate design;~~

Reasons: Original Section 5 C is duplicative of the reporting in original Section 5 E and therefore is unnecessary.

Sections (7)(A)2. & (7)(A)3.:

2. The level of base environmental expenses in the base rate revenue requirement from the prior general rate proceeding;

3. The levels of base environmental expenses in the base rate revenue requirement from the prior general rate proceeding as adjusted for the proposed date of the periodic adjustment;

Reasons: These provisions fall under the filing requirements of a utility seeking to adjust an ECRM rate between general rate proceedings. As previously noted in the reasons for changing sections (2)(I) and (2)(L), identification of an “environmental” versus a “non-environmental” rate base is not reasonably achievable.

4 CSR 240-20.091 Electric Utility Environmental Cost Recovery Mechanisms

Section (1)(B):

(B) Environmental Cost Recovery Mechanism (ECRM) means a mechanism established in a general rate proceeding that allows periodic rate adjustments, outside a general rate proceeding, to reflect the net increases or decreases in an electric utility’s incurred environmental costs **as compared to the electric utility’s base environmental expenses;**

Reasons: This is a definitional change necessary to ensure that the unwieldy and unreasonable exercise of determining an “environmental” and a “non-environmental” rate base is not required. For further discussion, see the reasons listed under (2)(I) and (2)(L) in the Chapter 3 rule, above.

Section (1)(D) – the rest of the Sections in (1) become (1)(D), (E), (F) and (G):

~~(D) Environmental revenue requirement means the base environmental expenses identified in the general rate proceeding which forms the base for future periodic adjustments of the ECRM;~~

Reasons: This provision falls under the definitions. As previously noted in the reasons for changing sections (2)(I) and (2)(L) of rule 4 CSR 240-3.162, identification of an “environmental” versus a “non-environmental” rate base is not reasonably achievable.

Section (2) (G):

(G) If an ECRM is approved, the commission shall determine a level of base environmental expenses included in the utility’s overall revenue requirement.

Reasons: As noted earlier, this change is necessary to eliminate the unwieldy and unreasonable exercise of determining and “environmental” and “non-environmental” rate base.

Sections (4)(A) & (4)(B):

~~(A) The periodic adjustment shall be based on environmental costs incurred since the prior general rate proceeding.~~

~~(B) The first periodic adjustment following the electric utility’s general rate proceeding in which the ECRM mechanism was established shall consist of **capital environmental costs to be included in the ECRM and any increases or decreases in environmental expenses, the sum of which will be compared to the base environmental expenses established in the electric**~~

utility's general rate proceeding in which the ECRM mechanism was established, less any decreases in costs directly related to the environmental costs included in the periodic adjustment. Subsequent periodic adjustments shall consist of any increases in capital environmental costs and any increases or decreases in environmental expenses as compared to the base environmental expenses established in the electric utility's general rate proceeding in which the ECRM mechanism was established, less (a) any decreases in costs directly related to the environmental costs included in the periodic adjustment and (b) any change in the accumulated depreciation reserve and related depreciation expense and property taxes for capital items whose costs are being recovered through the ECRM. The return applied to all capital environmental costs shall be the weighted cost of capital, including the return on common equity, established in the electric utility's general rate proceeding in which the ECRM mechanism was established. a comprehensive measurement of both increases and decreases to the environmental revenue requirement established in the prior general rate proceeding plus the additional environmental costs.

Reasons: These provisions fall under the filing requirements of a utility seeking to adjust an ECRM rate between general rate proceedings. As previously noted in the reasons for changing sections (2)(I) and (2)(L) of rule 4 CSR 240-3.162, identification of all environmental costs in base rates is not reasonably achievable. The language suggested by MEDA would identify environmental cost increases since the last rate proceeding less decreases in costs directly related to the environmental items identified in a previous ECRM adjustment and the less accumulated depreciation reserve, related depreciation expense and property taxes for capital items whose costs are being recovered through the ECRM. This approach provides for depreciation and property tax offsets similar to those adopted by the PSC in their Infrastructure System Replacement Surcharge (ISRS) rule. This approach will provide for a reasonable depreciation and tax offset and will be reasonably easy to administer. The language suggested by MEDA in the last sentence of section (4)(B) clarifies what return shall be applied to capital environmental costs.

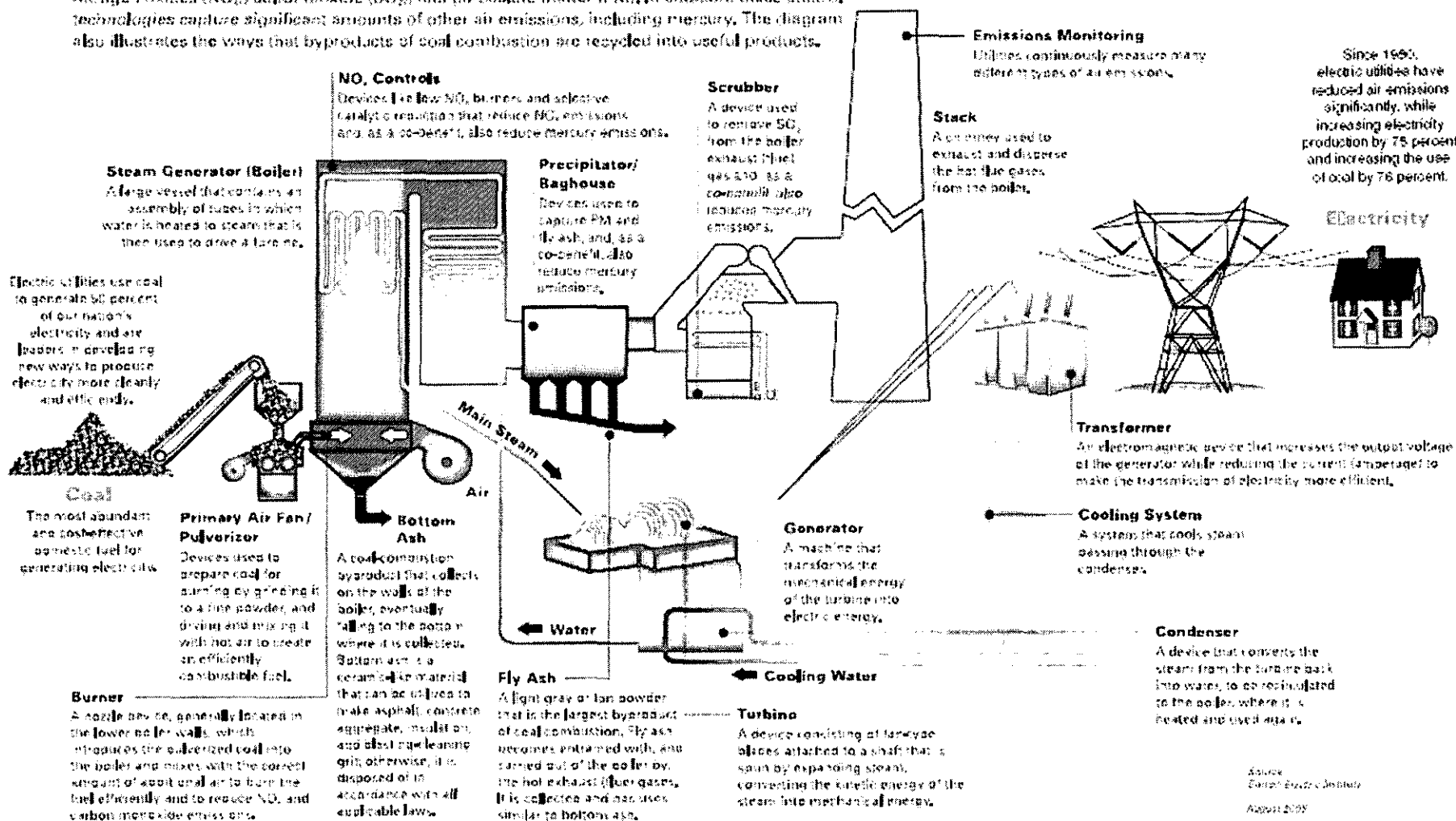
Section (12):

(12) Rule Review. The commission shall review the effectiveness of this rule by no later than ~~June~~ **December 31**³⁰, 2011, and may, if it deems necessary, initiate rulemaking proceedings to revise this rule.

Reasons: December 31, 2011 is consistent with the similar provision in section 17 of rule 3.162. The rule review provision for these rules should reflect the same date.

How Power Plants Are Reducing Air Emissions

This simplified diagram is illustrative of the operations at a large coal-based electric power plant. It explains the various control technologies in place at many U.S. power plants to reduce emissions to air, land, and water. These technologies are designed to control emissions of nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM). In addition, these control technologies capture significant amounts of other air emissions, including mercury. The diagram also illustrates the ways that byproducts of coal combustion are recycled into useful products.



Electric Power Generation and TRI

This diagram illustrates the operation of a "typical" large coal-based electric power plant, and notes those chemicals that may be reported for such a facility under the Environmental Protection Agency's Toxics Release Inventory (TRI) program. Under TRI, designated facilities must report annually on the amounts of listed chemicals released to the air, water, and land. A facility is required to report if it "manufactures" or "processes" 25,000 pounds or more, or "otherwise uses" 10,000 pounds or more of most of the listed chemicals. The reporting thresholds for mercury and dioxin are much lower at 10 pounds and 0.1 grams, respectively. Electric utilities that burn coal or oil began reporting their TRI releases in July 1999. This diagram indicates the primary TRI chemicals that a "typical" plant is likely to report.



Incoming Coal

Coal is typically shipped to a power plant by rail car or barge. The incoming coal may contain trace amounts of the following chemicals:

Arsenic
Barium
Beryllium
Chlorine
Chromium
Cobalt
Copper
Fluorides
Lead
Manganese
Mercury
Nickel
Selenium
Sulfides
Vanadium
Zinc

Coal Preparation

The coal is usually pulverized into a fine powder before being sent to a furnace.



Power Generation

The coal powder is then burned, yielding hot gases that boil water to create steam. The steam spins a turbine, which, in turn, drives a generator to produce electricity.

Flue Gas Treatment System

Particulate matter (ash) is removed from the combustion gases and, in some cases, a sulfur removal process is used.

Cooling Water System

Steam from power generation is condensed by cooling water and then reused in the boiler. Various chemicals are used to treat the cooling water to minimize corrosion, fouling, and scaling. This treatment process can result in certain wastewaters and waste solids.

Releases to Air

Treated gases are discharged to the air through a stack. As a result of the combustion of coal, the following TRI chemicals are produced:

Dioxin
Hydrochloric acid
Hydrogen fluoride
Mercury
Possibly some metals
Sulfuric acid

Releases to Land

Ash from the burning process is typically sent to an ash pond, landfill, or is used commercially. Other waste solids may also be sent to the land. The ash and waste can include various metals that are released during coal combustion, including:

Arsenic
Barium
Beryllium
Chromium
Cobalt
Copper
Lead
Manganese
Nickel
Selenium
Vanadium
Zinc

Releases to Water

Releases to water may involve chemicals from water treatment as well as the coal itself, including such TRI chemicals as:

Ammonia
Possibly some metals

This diagram was prepared by Dr. J. Whitton Porter, president of the Waste Policy Center in Leesburg, VA, and a former assistant administrator of the U.S. EPA. He can be reached at:

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Moody's outlook, U.S. electric utilities

Fri Jan 5, 2007 6:38pm GMT

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(The following statement was released by the ratings agency)

Jan 5 - The US electric utility industry continues to have a stable rating outlook despite higher capital expenditures and increasing regulatory pressure, Moody's Investors says in its annual industry outlook on the sector. The stable outlook reflects Moody's expectation that most utilities will be able to maintain reasonably constructive relations with their regulators and requests for rate increases will generally be treated in a fair and balanced manner. After a period of debt reduction and a move away from higher risk, non-regulated investments as part of a "back to basics" trend among many utilities, **Moody's says most companies are now facing higher capital investments for both environmental compliance and new generation capacity.**

There is increasing competition for financial capital as companies look to retain capital for growth at the same time as they seek to increase returns to shareholders.

"Investment is expected to be targeted to all aspects of the traditional utility business - generation, transmission, and distribution," says Moody's Vice President/Senior Credit Officer Michael Haggarty. "Constructive regulation supporting the full and timely recovery of prudently incurred costs is critical to the continued ratings stability of the sector." Haggarty notes that in 2006 several utilities faced rating pressure because political intervention led to delayed or insufficient rate increases when multi-year rate freezes expired. Overall, regulatory risk has been increasing for the industry as costs rise and utilities rely on regulatory filings for timely recovery of these costs.

Increasingly stringent environmental mandates, both at the federal and state levels, will most seriously affect those utilities with a large percentage of coal-fired generation in their overall generation mix, says Moody's. During the last year, upgrades and downgrades were roughly balanced, keeping the average rating for the electrical utilities at an investment-grade Baa1. While there are slightly more negative outlooks on utilities than positive outlooks, 81% of all utility outlooks are stable. The full title of the industry outlook is "U.S. Electric Utilities." (emphasis added)

Environmental Compliance Costs Are Significant

Still another major financial challenge looms for the electric utility industry—the massive price tag for compliance with environmental regulations. All electric utilities are subject to literally hundreds of environmental rules, including dozens of federal and state air and water quality requirements created in the wake of the Clean Air Act and Clean Water Act.

The combined impact of these regulations—and newer regulations—is the annual expenditure of billions of dollars to help ensure protection of the air, land, and water. From 2002-2005, the electric utility industry as a whole spent \$24 billion on compliance with federal environmental laws; state and local rules drive that total even higher.

Electric utilities are more than ready to do their share to help preserve and improve our nation's environmental quality, and the evidence is there to support that. As illustrated in Figure 7, since 1980, air quality in the United States has improved dramatically, and emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO_2) have fallen significantly—all during a time in which demand for electricity increased.

But the costs associated with continuous environmental improvements are significant. For example, according to the U.S. Environmental Protection Agency, complying with two new federal regulations—the Clean Air Interstate Rule and the Clean Air Mercury Rule, which are aimed at further reducing power plant emissions of NO_x , SO_2 , and mercury—will cost the electric utility industry \$47.8 billion between the years 2007 to 2025.⁶ As utilities enter another phase of emissions reductions, those costs will be reflected in customers' electric bills and must be borne equitably by all customers on the system.

Figure 7: Power Plants Reduce Emissions Despite Increasing Electricity Demand 1980-2004

