



Indiana Utility Regulatory Commission

**Regulatory Flexibility Report
to the Indiana General Assembly '08**

Tradition. Innovation. Change.

A circular inset image showing a close-up of a fountain pen nib resting on a piece of paper with faint handwriting.

Executive Summary

EXECUTIVE SUMMARY

The Indiana Utility Regulatory Commission (Commission) is pleased to present its 2008 Report to the Regulatory Flexibility Committee of the Indiana General Assembly. This Report highlights key issues that confront Indiana Electric, Natural Gas, Communications and Water/Wastewater utility industries and discusses the role of the Commission in managing these issues. Over the course of the last year, many topics have been addressed including: energy efficiency, aging infrastructure, the rising cost of energy, access to broadband and economic development.

The Commission has been monitoring statewide and national efforts to address these issues in addition to remaining at the forefront of discussion with legislators, other state regulators and commissions. The Report broaches many of these topics and provides updates on how they affect Indiana. While each industry has unique concerns, several discussed in this Report are common to more than one type of industry. This Executive Summary contains a brief overview of these cross-industry and industry-specific issues, which are more fully addressed in the body of the Report. By examining cross-industry concerns, certain trends emerge along with areas that may need more attention. Plus, they demonstrate how similar utilities are with regard to regulation and support.

The Report contains, as an appendix, a copy of the External Client Survey undertaken by the Commission in 2007. Even though the results of the Survey were very positive, the Commission provided a response that addressed the issues identified in the Survey and continues to explore and undertake efforts to enhance overall performance. We have used this Report as an opportunity to engage in dialogue with the Regulatory Flexibility Committee and to shed light on policy issues affecting Indiana, an area we have given additional focus. The Commission has also augmented the Report by including a section that summarizes the number and type of consumer complaints received by the Commission's Consumer Affairs Division. For your convenience, there is also a list of acronyms and a glossary in the back of the Report.

CROSS-INDUSTRY ISSUES

Typically, Indiana's utility industries have rotated through maintenance and upgrade cycles. For example, the electric industry may spend several years repairing infrastructure only to be followed by the water industry once those changes are complete. However, this cycle has been broken, and we stand at a time where infrastructure must be addressed on a much broader scale across all industries. The need for immediate infrastructure attention is a response to significant technological advancements, environmental legislation and inevitable deterioration. The Electric, Natural Gas and Water/Wastewater sections of this Report specifically discuss aging infrastructure and the potential problems and costs associated with repairing or replacing old facilities. Coupled with aging facilities is increasing consumer demand for electric, natural gas and water services, which can accelerate the deterioration of equipment and limit periods in which facilities can be conveniently removed from service for maintenance or repair. Obsolescence is an additional concern for the telecommunications industry with many carriers replacing copper plant with fiber-optic and coaxial cable facilities.

Depending on the industry, the cost of repairing or replacing infrastructure varies greatly, and the question of who should pay is always an issue. As the Commission, we are to balance the interests of both the utilities and the consumers. One way in which we accomplish this is by allowing partial to full cost recovery for projects that improve the overall efficiency and reliability of a given service but only after evidence of such need has been reviewed. The industry facing the highest costs for expansion and repair is the Water/Wastewater industry. To recover infrastructure investment, the industry has utilized Extensions and Replacements, System Development Charges (SDCs), Distribution System Improvement Charges (DSICs) and the Minimum Standard Filing Requirements (MSFRs). However, the industry still struggles to meet necessary expenditures each year for maintenance. In addition to the cost recovery options listed above, adjustable rate mechanisms or trackers are used across all industries in some form.

In an effort to reduce costs, the Commission encourages utilities to explore and implement new efficiency measures that may reduce or delay the need for some

investments, particularly in the energy sector. For example, the Commission recently issued its Phase I order in an investigation into the level and overall effectiveness of demand side management (DSM) programs in the state. DSM means the planning, implementation and monitoring of a utility activity designed to influence customer use of electricity that produces a desired change in a utility's load shape. By better managing demand during peak hours, less stress is imposed upon the electric utilities' infrastructure. The Commission has also encouraged the construction of energy efficient buildings and for existing homes to take part in weatherization practices.

Consequently, state and nationwide concerns about availability and access to vital natural resources and the potential environmental impact of new construction have increased interest in conservation and efficiency measures in the electric, natural gas and water industries. In the short-term, conservation and efficiency measures can reduce the demand for electricity, natural gas or water, thereby, reducing upward pressure on prices and lowering customer bills. In the long-term, conservation and efficiency measures can reduce or delay the need for investment in new resources and facilities. Deployment of broadband communications services can also result in environmental efficiencies by enabling more extensive use of teleconferencing, telecommuting and e-commerce. The Commission has a long-standing practice of encouraging utilities to investigate cost-effective and innovative conservation and efficiency measures.

An emerging operations and cost factor is the increasing federal involvement in what previously were exclusive state decisions. Federal legislation mandates examination and determination of answers to federal questions about how Indiana utilities operate. The emergence of RTO's brings with them the involvement of the Federal Energy Regulatory Commission which lessens Indiana's control of its utility operations and complicates Indiana's ability to evaluate utility costs. The federal government's continuing expansion of its activities and oversight has created a new dimension of operating needs for the commission. Now, we must respond to directives, cope with new business models and represent Indiana's interests in new forums.

NATURAL GAS

During the 2007–2008 winter heating season, the demand for natural gas increased relative to the demand in the 2006-2007 heating season due mainly to colder weather. Despite the colder weather, the price for natural gas was less volatile due to growth in domestic natural gas production, record high liquefied natural gas (LNG) imports and storage volumes that exceeded the five-year average. This combination of increased production and storage contributed to lower overall gas prices. An additional moderating effect on the price of natural gas was the absence of significant hurricane activity or other disruptions to the production and shipment of natural gas. While the price of natural gas was less volatile during the winter heating season, a hotter than normal summer resulted in greater demand for gas-fired generation of electricity and use of natural gas at dual-fired power plants.

Overall, natural gas consumption continues to increase across all sectors, residential, commercial and industrial. While new production technologies will increase supply, and conservation efforts will reduce demand, fundamental market conditions seem likely to result in increasing natural gas prices and price volatility. These underlying market conditions have prompted consideration of regulatory changes that are fully discussed in the Natural Gas Report. The Natural Gas Report focuses on a number of key issues in the gas industry. These issues include:

- Energy Efficiency and Rate Decoupling – The Commission has implemented rate decoupling as a regulatory mechanism and continues to study the impact of decoupling and energy efficiency on utilities and customers;
- Adjustable Rate Mechanisms – A variety of adjustable rate mechanisms (trackers) are available and being utilized by gas utilities;
- Gas Pipeline Infrastructure – Indiana’s interstate gas pipeline infrastructure is expanding with construction of the Rockies Express Pipeline; and
- Call-Before-You-Dig – The need to enhance Indiana’s program as outlined in the Pipeline Integrity, Protection, Enforcement and Safety Act of 2006.

ELECTRICITY

Indiana has consistently ranked as one of the lowest cost states for providing electricity to its citizens. Moving from a ranking as the 11th lowest cost state in 2007, Indiana now ranks as the 14th lowest in 2008. This difference in ranking between 2007 and 2008 is likely due to the timing of rate and fuel cost adjustment increases in Indiana and other states. Neighboring states' average residential rates for 2008 rank as follows: Kentucky 6th, Ohio 26th, Illinois 31st and Michigan 32nd. While Indiana remains one of the lowest cost states for providing electricity, it is likely that the overall cost of electricity in Indiana and other states will continue to rise.

The increase in the cost of electricity is attributable to several factors including, but not limited to, the following:

- Increasing demand for electricity;
- Costs associated with the construction of new generation plants;
- Costs associated with additional environmental regulations;
- Costs to repair or replace aging infrastructure;
- Continuing fuel and transportation cost increases; and
- Increasing construction and financing costs.

The Indiana State Utility Forecasting Group's (SUFG) most recent forecast projects that Indiana's demand for electricity will grow at 2.46% per year over the 20-year forecasting period (2006-2025). This same SUFG forecast predicts that real (inflation adjusted) electricity prices in Indiana will increase on average 4.33% annually through 2010 and then slowly fall through the remainder of the forecast period. These forecasted increases do not include any carbon-related costs.

Electricity rates are projected to increase through 2010 due, in part, to the impact of compliance with environmental regulations and costs associated with the construction of new generation. The nationwide demand for labor, materials, equipment and financing is driving up the costs of these vital inputs. However, a key element in holding down the costs of large construction projects is a utility's credit rating. One prominent component

used to determine a utility's credit rating is the state's regulatory environment. The Commission's execution of its responsibility to balance the needs of consumers and utilities alike is well-respected by the financial community. This perspective results in lower capital costs for utilities which ultimately contribute to lower rates.

As previously mentioned, tracking mechanisms are a cross-industry issue. The Indiana Code and Indiana Administrative Code allow utilities to request the tracking of revenues and/or expenses that are largely outside the utility's control. Utilities may also request the tracking of capital investments in generation resources and clean coal technologies. These mechanisms allow the pass-through of specific costs outside of a base rate case in specific streamlined proceedings. Fuel costs, including transportation, are an example of expenses that are commonly tracked by electric utilities due to their historic volatility in commodity prices. A utility's ability to track costs such as these helps to support its earnings and is viewed favorably by credit rating agencies.

The Electricity Report addresses the issues discussed above in more detail. The following topics are also included in the body of the Electricity Report:

- Infrastructure – Construction and utilization of new generation technologies in the state including the development of wind energy;
- Demand Response – Advanced metering and the “Smart Grid”;
- Regional Transmission Organizations – Benefits and challenges;
- Federal Legislation – Energy Policy Act of 2005 and Energy Independence & Security Act of 2007; and
- New Generation Sources.

COMMUNICATIONS

In 2007, the Commission continued its efforts to implement the requirements contained in HEA 1279, which was passed by the Indiana General Assembly on March 14, 2006 and is codified at Ind. Code 8-1-2.6. The General Assembly, through HEA 1279, declared in relevant part that:

- Maintenance of universal telephone service is a continuing goal of the Commission;
- Competition in telecommunications has become commonplace;
- Advancements in technologies are substantially increasing consumer choice, reinventing the marketplace and making available highly competitive products and services and new methods of delivering local exchange service;
- Traditional regulation is not designed to deal with a competitive environment and technological advancements;
- Full and fair competition is necessary for Indiana consumers to have available the widest array of state-of-the-art communications services at the most reasonable cost possible; and
- Flexibility in the regulation of telecommunications services is essential to the well-being of Indiana.

HEA 1279 also declared that the public interest requires the Commission to be authorized to formulate and adopt rules and policies that will permit it, in the exercise of its expertise, to regulate and control the provision of telecommunications services to the public in an increasingly competitive and technologically changing environment.

Pursuant to the express provisions set forth in HEA 1279, the Commission continues to interface with providers and other interested parties in order to balance the interests of industry and consumers. The Commission also monitors the status of the telecommunications and video industries in order to provide the best available information to the General Assembly regarding competition in telephone and video

markets and achievement of ubiquitous broadband deployment throughout Indiana. The Communications Report focuses on the following key issues:

- Broadband – The availability of broadband throughout the state at affordable rates plays a vital role in Indiana’s economic success. Access to broadband is important for all industries, and decisions to locate facilities in Indiana, or to maintain or expand existing facilities in the state, have been made based on the availability of adequate broadband;
- Video Service – Data reflected in the Report indicates that six new video providers are competing for customers in Indiana since the passage of HEA 1279. Additionally, the report discusses the Commission’s recent assumption of statewide enforcement of the FCC’s video customer service standards;
- Indiana State Universal Service Fund (IUSF) – The purpose of the IUSF is to provide cost recovery so that companies in high cost areas may continue to offer services for rates that are reasonable and affordable; and
- Indiana Lifeline Assistance Program (ILAP) – The ILAP will increase funds returned to Indiana and increase assistance to low-income residents by helping these individuals stay connected to the network, which enhances the overall value of the network statewide.

WATER/WASTEWATER

Indiana's water and wastewater utilities are diverse in both their size and the degree to which they are regulated. Of regulated water utilities, the largest serves more than a quarter of a million customers; whereas, the smallest serves only 16 customers. While there are approximately 835 water systems statewide, only 125 are regulated by the Commission. The Water/Wastewater section of the Report focuses on the following key issues:

- Infrastructure – Water/wastewater utilities are challenged by aging infrastructure, high capital requirements, lack of scale and the fragmentation of the industry;
- Troubled Utilities – Small, troubled utilities present regulatory challenges due to the disproportionate time and attention required by the Commission and the inter-agency cooperation required to resolve problems;
- Sub-billing (or sub-metering) – Due to the passage of Indiana Code 8-1-2-1.2, disputes regarding sub-billing between tenants and landlords can now be resolved by the Commission's Consumer Affairs Division; and
- Water Supply – Continuing population growth and the introduction of ethanol production into Indiana's industrial sector is driving an increasing demand for water.

As further discussed in the Water/Wastewater section of the Report, the Commission recognizes the challenges faced by many small water/wastewater utilities in Indiana and is implementing expanded programs to help with rate case filings submitted by small utilities that generally do not require formal hearings. In addition, the Commission is continuing its educational outreach programs to the industry, providing technical assistance and resources to meet the growing needs of water/wastewater utilities statewide.



Natural Gas

2008 NATURAL GAS REPORT

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I. NATURAL GAS OVERVIEW

Industry Structure

The Indiana Utility Regulatory Commission regulates the rates and charges of intrastate pipelines and local distribution companies and, through its Pipeline Safety Division, the infrastructure that transports natural gas.

The natural gas industry consists of three systems: producers (the gathering system), interstate and intrastate pipelines (the transmission system), and local distribution companies (LDCs) (the distribution system). Interstate pipelines, regulated by the Federal Energy Regulatory Commission (FERC), carry natural gas across state boundaries; intrastate pipelines, regulated by state commissions, carry natural gas within state boundaries. The Indiana Utility Regulatory Commission (Commission) regulates the rates and charges of intrastate pipelines and LDCs and, through its Pipeline Safety Division (Pipeline Safety), regulates the infrastructure that transports natural gas.

Production Overview

The production of natural gas begins with raw natural gas extracted from the wellhead. Initial purification of natural gas occurs at the wellhead before entering the low pressure, small diameter pipelines of the gathering system. The natural gas is re-purified at the processing station. Purified natural gas consists of approximately 90 percent methane, compared to raw natural gas which is generally 70 percent methane combined with a variety of other compounds. For safety reasons, before allowing natural gas into the pipeline system, it is required to meet strict standards.¹

Transporters – Pipelines

The vast majority of natural gas consumed in Indiana is from out-of-state production, predominantly the Gulf of Mexico. In 2006, Indiana consumed approximately 500

¹ http://www.naturalgas.org/naturalgas/processing_ng.asp

million dekatherms (Dth) of natural gas², of which roughly 2.9 million Dth³, or less than one percent was from production within the state. This illustrates Indiana's reliance upon the transmission system to carry natural gas from the gas producing regions of the country into the state.

The transmission system includes interstate and intrastate pipelines, which carry gas from producing regions to LDCs, industrial consumers and power generation customers. The Heartland Pipeline (Heartland) and the Ohio Valley Hub (OVH) pipeline are the two intrastate pipelines under the Commission's jurisdiction. The Commission governs the pipelines' operations, services and rates. Heartland runs west to east, connecting the Midwestern Gas Transmission (MGT) interstate pipeline in Sullivan, Indiana to Citizens Gas & Coke Utility's (Citizens) underground storage facility in Greene County. Heartland supplies firm and interruptible transportation services with a design capacity of 80,000 Dth per day on a firm basis and up to an additional 10,000 Dth per day on an interruptible basis. OVH, located in Knox County, connects two interstate pipelines (Texas Gas Transmission and MGT) to the Monroe City Gas Storage Field. OVH has a storage capacity of approximately 2.7 million Dth and firm transmission capacity of 60,000 Dth per day.

LDCs

The Commission regulates the rates and charges of twenty-two natural gas utilities in Indiana with operating revenues totaling \$2.5 billion.

Gas passes through the transmission system and enters the distribution system, where LDCs take ownership to sell and deliver the gas to retail customers. The Commission regulates the rates and charges of twenty-two natural gas utilities in Indiana with operating revenues totaling \$2.5 billion⁴ (Appendix A). Of the regulated entities, one is a

² http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_VC0_mmcfc_a.htm

³ http://tonto.eia.doe.gov/dnav/ng/ng_prod_sum_a_EPG0_FPD_mmcfc_a.htm

⁴ 2007 Annual Reports filed with the Commission

not-for-profit, two are municipalities and nineteen are investor-owned utilities (IOUs). Pursuant to statute, municipal utilities may elect to “opt out” of the Commission’s jurisdiction for rates and charges in favor of local control in determining rates, but these utilities remain under Pipeline Safety’s jurisdiction.⁵ Seventeen gas utilities have elected to “opt out” of the Commission’s oversight.

The three largest IOUs providing gas service in Indiana are Northern Indiana Public Service Company (NIPSCO), Indiana Gas Company, Inc. (Indiana Gas) and Southern Indiana Gas & Electric Company, Inc. (SIGECO). NiSource is the parent company of NIPSCO and Vectren Energy Delivery (Vectren) is the parent company of Indiana Gas and SIGECO. NIPSCO and SIGECO are combination utilities, providing gas and electric service. Citizens, a public charitable trust (treated as a municipal for purposes of regulation), serves mainly the Indianapolis metropolitan area. Citizens and the three IOUs mentioned above represent the four largest natural gas utilities in Indiana.

Customer Classes

LDCs serve three main customer classes consisting of residential, commercial and industrial. The residential customer class consists of single-family homes and small multi-family dwellings. Some residential customers in the NIPSCO service territory have an option of selecting an alternative natural gas supplier, with NIPSCO providing the transportation service of such gas to the customer.

The residential class consumed approximately 143 million Dth of natural gas in 2007.⁶ The Residential Gas Bill Analysis, Appendix B, offers a snapshot of residential billing for the month of January in each of the past five years. Because gas rates change frequently (in some cases monthly) due to gas cost adjustments, the analysis does not necessarily reflect current billing amounts.

⁵ Pursuant to I.C. § 8-1.5-3-9

⁶ http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dc_u_SIN_a.htm

The commercial customer class typically consists of office facilities, retail facilities, wholesale facilities and larger residential complexes. Some commercial class customers may choose to receive bundled service or transportation service from the LDC. In 2007, the commercial class consumed approximately 74 million Dth of natural gas.⁷

The industrial customer class typically purchases the highest volume of gas both individually and collectively. This class may receive bundled service or buy gas directly from one or more producers and/or marketers, paying the LDC solely for the distribution costs associated with delivering the gas from the city gate to the industrial customers' facilities. In 2007, Indiana's industrial customers consumed about 273 million Dth, the fifth highest amount in the U.S.⁸

II. STATE ISSUES AND ACHIEVEMENTS

Decoupling

Traditional Ratemaking

<p>Traditional ratemaking allows a utility to recover fixed costs based on an estimated test year volume of natural gas sold.</p>
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Traditional ratemaking allows a utility to recover fixed costs based on an estimated test year volume of natural gas sold. Hence, depending on sales, a utility may over or under recover costs. Fixed costs are non-commodity costs, such as operational costs, that do not vary with the quantity of gas sold. Under traditional ratemaking, a utility captures a portion of its fixed costs through the volume of natural gas sold. Therefore, a utility can recover fixed costs fully only when customers consume a certain threshold volume of natural gas as established in the utility's last rate case.

⁷ http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_SIN_a.htm

⁸ http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vin_mmcf_a.htm

Decoupling separates the recovery of a gas utility's fixed costs from the volume of natural gas sold.

In recent years, retail customers have consumed less natural gas due to rising gas costs, weather variations, conservation efforts and a new generation of more energy-efficient appliances. As a result, Indiana gas utilities may not sell the volumes of gas necessary to recover their fixed costs and earn an allowed return on investments, creating an incentive for the LDCs to encourage greater use. This conflicts directly with efforts to promote energy efficiency. For this reason, the Commission received a number of proposals to modify current rate structures. These alternative rate design proposals are also known as “decoupling”. Decoupling separates the recovery of a gas utility’s fixed costs from the volume of natural gas sold. Currently, the Commission has a pending investigation⁹ into these rate design alternatives and energy efficiency measures for natural gas utilities.

Types of Decoupling Mechanisms

The Commission must weigh the strengths and weaknesses of any proposed alternative rate design, decoupling mechanism, or innovative proposal to allow appropriate cost recovery for the utilities while assuring fair and equitable treatment to all natural gas customers.

There are several decoupling rate designs. Some of the more prominent decoupling alternatives include straight-fixed variable, normal temperature adjustments (NTA) and revenue stabilization. These alternatives strive to break the link between the amount of gas sold and recovery of fixed costs. The Commission approved¹⁰ a variety of

⁹ In Cause No. 43180, the Commission investigates rate design alternatives and energy efficiency measures for natural gas utilities.

¹⁰ In Cause Nos. 42943 & 43046, the Commission approved an alternative regulatory plan that includes a sales reconciliation decoupling mechanism for Southern Indiana Gas & Electric Company and Indiana Gas Company, Inc. In Cause No. 42767, the Commission approved an alternative regulatory plan that includes decoupling mechanism and energy efficiency for Citizens Gas & Coke Utility.

decoupling mechanisms that provide for the recovery of fixed costs based on sales volumes through a periodic tracker adjustment. The Commission also approved NTA decoupling mechanisms for many of our gas utilities.¹¹

Potential Benefits to Implementing Decoupling Mechanisms

By severing the link between cost recovery and sales volume, decoupling mechanisms can lead to a number of benefits, including:

- Gas utilities may develop energy efficiency programs without concerns about inadequate cost recovery;
- Energy efficiency programs may encourage economic development by reducing energy costs to businesses;
- With greater certainty of cost recovery, the utility's credit rating may improve, thus lowering the cost of debt for capital which may also result in lower overall rates; and
- Decoupling mechanisms may reduce the variability in customer bills by smoothing weather-related volatility.

Potential Disadvantages of Implementing Decoupling Mechanisms

Some observers argue that certain forms of decoupling could increase rates paid by consumers. Potential disadvantages include:

¹¹ In Cause No. 42890, the Commission approved a Normal Temperature Adjustment mechanism for Indiana Gas Company, Inc. and Southern Indiana Gas & Electric Company. In the Consolidated Petition, Cause Nos. 43107, 43108, 43109, 43110, 43129, 43135, 43136, 43137, 43141, a Normal Temperature Adjustment mechanism was approved for Midwest Natural Gas Corporation, Indiana Utilities, South Eastern Indiana Natural Gas Company, Fountaintown Gas Company, Community Natural Gas Company, Boonville Natural Gas Corporation, Chandler Natural Gas Corporation, Indiana Natural Gas Corporation and Lawrenceburg Natural Gas Company. In Cause No. 43202, the Commission approved an NTA for Citizens Gas & Coke Utility and Citizens Gas of Westfield. In Cause Nos. 43208 & 43209, the Commission approved an NTA for Ohio Valley Gas, Inc. and Ohio Valley Gas Corporation.

- The straight-fixed variable design may require a higher service charge to recover fixed costs causing summertime bills, when natural gas usage is typically low, to be higher than under traditional rates. The overall bill impact, even if minimal, could potentially be higher;
- Some forms of decoupling rate designs may penalize customers for energy efficiency efforts, because the utility is able to increase rates to compensate for reduced sales. This may reduce a customer’s natural incentive to conserve energy;
- Some view revenue stabilization as a “guarantee” of recovery of fixed costs and authorized returns. Opponents of this type of decoupling mechanism note that regulation provides a reasonable opportunity, not a guarantee, to earn a profit; and
- Low-income customers may be at a disadvantage because their ability to conserve and reduce the commodity or natural gas component of their bills is limited due to the affordability of weatherization.

The Commission must weigh the strengths and weaknesses of any proposed alternative rate design, decoupling mechanism or innovative proposal to allow appropriate cost recovery for utilities while assuring fair and equitable treatment of all natural gas customers.

Energy Efficiency

Utility-sponsored energy efficiency programs have been included in most of the approved decoupling rate designs. While decoupling is not equivalent to energy efficiency, the two concepts entwine as gas utilities are advocating conservation efforts with the assurance of cost recovery. Currently, four Indiana gas utilities have decoupling mechanisms approved that include energy efficiency programs. The Commission established oversight boards to govern the energy efficiency programs. The oversight boards are comprised of representatives from various energy groups, utilities, state agencies, consumer groups and educational institutions such as the State Utility Forecasting Group at Purdue University. The representatives on the oversight boards use

a consensus decision-making process to approve a proposed portfolio of programs as well as the associated costs and measures of program effectiveness.

Commission staff oversees the activities of the oversight boards.

Commission staff oversees the activities of the oversight boards. However, in the future, the various individual utility programs may consolidate into a single statewide program. Consolidation efforts would allow for economies of scale and significant market influence not gained by smaller individual programs. Customers could benefit from a unified oversight board due to consistency in program structure, messaging and education efforts throughout the state.

Universal Service/Winter Warmth Programs

On January 1, 2005, Citizens and Vectren began a two-year pilot “Universal Service Program” to assist eligible and qualifying low-income customers by providing them with a significant reduction in their gas bills.¹² The utilities base the bill reductions on tiers that take into account the additional burdens placed on customers whose income level meets certain guidelines. On December 15, 2005, NIPSCO launched its Winter Warmth program, initially approved as a one-year pilot program, but extended for a second year by the Commission to assist qualifying low-income customers by providing a combination of security deposit assistance and gas bill assistance prior to and during the critical winter heating season.¹³ The funding for the programs is comprised of a combination of utility funds and mandatory customer contributions included in customers’ bills.

¹² On August 18, 2004, the Commission approved a settlement agreement between the OUCC, Citizens Action Coalition of Indiana (CAC), an ad hoc group of customers known as the Manufacturing and Health Providing Customers (MHPC), Citizens and Vectren in Cause No. 42590.

¹³ On December 15, 2004, the Commission approved a settlement agreement between NIPSCO and the OUCC in Cause No. 42722.

In its consolidated final order, the Commission found that although there were benefits to program participants, the parties were unable to quantify the benefits received by ratepayers that contribute to but do not participate in the programs.

In its consolidated final order of the cases, the Commission found that although there were benefits to program participants, the parties were unable to quantify the benefits received by ratepayers that contribute to but do not participate in the programs. Thus, the Commission extended these programs for two more years upon which time they will terminate.¹⁴ The parties have the opportunity to file new petitions seeking to implement new programs.

Price Mitigation Programs

The Commission remains concerned about price volatility in the natural gas market, as price volatility increases Indiana gas utilities' susceptibility to price risk. The Commission continues to recommend that gas utilities incorporate a diversified gas portfolio in their operations to mitigate price risk. Gas utilities are encouraged to thoroughly review the benefits of a diversified portfolio of fixed price gas, storage gas (if available), spot market priced gas, and other available financial and physical hedging options to reduce volatility.

A typical diversified portfolio may consist of a mix of spot market gas, fixed price gas and storage gas. Spot market gas purchases are usually made daily on the open market at a stated price. Fixed price gas purchases are for delivery at some point in the future at a contracted price. A fixed contract is usually short-term in nature, typically twelve months or less in advance of consumption.

Storage gas purchases may either be stored in a storage facility or on a pipeline. The larger gas utilities often use their own storage fields. Most of the smaller Indiana gas utilities do not have their own storage fields; therefore, they utilize pipeline storage

¹⁴ The November 7, 2007 Order in Cause Nos. 43077 and 43078 modified a settlement agreement between all parties, which called for an extension to the programs.

options. However, pipeline storage can pose problems for the smaller gas utilities. One requirement for pipeline storage is that the stored gas be at a stated level by the month of April. When the heating season is warmer than normal, the utilities' usage is lower and the stored gas remains in the pipeline. In the later months of the heating season, the smaller utilities are under pressure to withdraw gas to avoid monetary penalties from the pipeline. The larger gas utilities avoid this by moving gas from pipeline storage to their own storage fields.

Long-term contracts are also a hedging option available, allowing gas utilities to purchase a volume of gas at a stated price over a period, usually 12 months or longer. By locking in a price for an extended period, long-term contracts reduce price volatility. Occasionally, spot market gas prices tended to be below long-term contract prices, rendering long-term contracts less attractive. Long-term contracts are becoming more desirable with improved profit margins. Thus, gas utilities are once again contemplating the benefits of long-term contracts to reduce daily price volatility.

For the Commission to allow full recovery of gas costs, each gas utility must demonstrate that its purchasing strategy is reasonable and prudent, given the best information available at the time.

The gas utilities have been encouraged by the Commission to include these elements in their gas portfolio. However, the Commission does not specify the degree of these elements. Given the current market environment, the Commission believes that mandating specific actions for a gas utility would reduce the flexibility in gas-purchasing decisions needed to address frequent changes in the marketplace. For the Commission to allow full recovery of gas costs, each gas utility must demonstrate that its purchasing strategy is reasonable and prudent, given the best information available at the time.¹⁵

¹⁵ Pursuant to I.C. § 8-1-2-42(g)

Adjustable Rate Mechanisms (Trackers)

An adjustable rate mechanism (tracker) allows for the timely recovery of costs that are substantially outside the utility's ability to control. Through an expedited process, the Commission reviews the costs associated with the tracker mechanism. The Commission has authorized the following trackers:

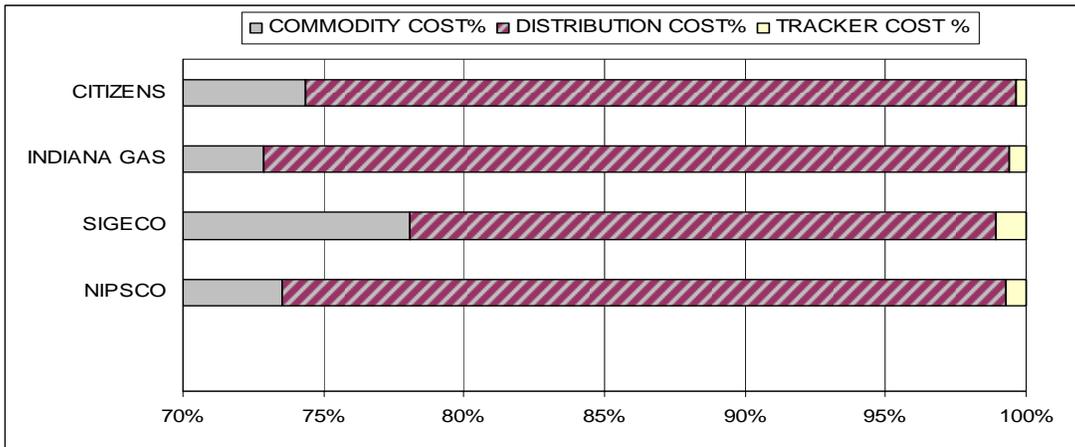
- Gas Cost Adjustment (GCA) – Pursuant to statute, the GCA mechanism allows a gas utility to recover the commodity cost of gas not recovered through rate case established rates. This is a dollar-for-dollar pass-through whereby the utilities do not profit, but merely recover the cost of the purchased gas. The GCA process allows timely recovery of prudently incurred gas costs.
- Pipeline Safety Adjustment (PSA) – The PSA allows the gas utility to recover prudently incurred, incremental non-capital expenses caused by the requirements of the Federal Pipeline Safety Improvement Act of 2002 (PSIA). The PSIA imposes many new requirements on pipeline operators.
- Energy Efficiency Funding Component (EEFC) & Sales Reconciliation Component (SRC) – The EEFC provides funds for the utility to promote energy efficiency. The SRC allows recovery of the rate case level of expenses from residential and commercial ratepayers, which would otherwise be lost due to energy efficiency programs.
- The Normal Temperature Adjustment (NTA) – reduces the risk of the gas utility not recovering approved margin due to warmer-than-normal temperatures and mitigates the possibility of over-earning due to colder-than-normal temperatures during the heating season.

**On average, the GCA mechanism accounts for approximately
75 percent of a residential customer's monthly gas bill.**

Trackers provide utilities with a better opportunity to achieve authorized returns. The recovery of costs associated with societal benefits or for normal operations of the utility improves the financial health of the utility, which benefits both the utility and consumers.

On average, the GCA mechanism accounts for approximately 75 percent of a residential customer’s monthly gas bill; whereas, the distribution or fixed operational costs account for approximately 23 percent. All other trackers approved by the Commission account for less than two percent of a customer’s monthly gas bill. The following table demonstrates this cost analysis.

**Table 1
Four Largest Indiana Gas Utilities
Percentage of Residential Billing Components**



Renewable Energy

Renewable energy serves as an alternative to conventional fuels such as natural gas, fuel oil and coal.

Renewable energy serves as an alternative to conventional fuels such as natural gas, fuel oil and coal. Since landfills are the largest human-generated source of methane emissions in the United States, capturing and using this methane for energy is a growing source of renewable energy. Currently, there are fourteen operational landfill gas (LFG) utilization projects in Indiana, however, there is potential for more LFG projects in the future.

Another source of renewable energy is the creation of methane gas or renewable natural gas (RNG) from anaerobic digestion of organic material from livestock. In

northern Indiana, there is one project involving two dairy farms with approximately 40,000 dairy cows that is in the process of becoming a supplier of pipeline-grade RNG. These farms may produce approximately 900,000 Dth annually. Since the utility requires upgrades to move the RNG throughout its system, cooperation will be necessary between the farms and the utility.

Given recent concerns regarding energy efficiency and environmental pollution, interest in agricultural organic and human-generated waste may lead to more alternatives to conventional fuels. The Commission expects additional RNG projects in the near future. These sustainable sources of natural gas provide economic and environmental benefits and continued success of these types of projects is important to Indiana's energy future.

Competition for Natural Gas Supplies & New Gas Operators

Landfill Gas

Competition for large industrial and commercial customers exists between natural gas utilities and LFG providers. Traditionally, these customers have used natural gas but are starting to utilize landfill gas due to technological cost savings. However, the option of choosing LFG is limited, since a customer must be within close proximity of a landfill to access the resource.

The implications of utilizing LFG are different for natural gas utilities and communities. When a large industrial or commercial customer switches to LFG, a utility loses a large volume consumer and the associated revenues. This revenue loss places a burden on the existing utility customers to compensate for the deficit. Alternatively, LFG projects benefit communities through the creation of jobs and use of renewable energy.

Electric Generation

Nationally, natural gas has become an increasingly popular fuel choice for the generation of electricity, particularly during periods of peak electricity demand. In 2000, the U.S. added over 23,000 megawatts (MW) of additional new electric generation. Of

this new capacity, natural gas-fired additions made up 22,238 MW or approximately 95 percent of the total.¹⁶ In the year 2014, it is projected that natural gas will provide 474,812 MW or 40 percent of the nation’s electric capacity needs.¹⁷ By 2014, Indiana may produce 6,934 MW or 23 percent of its electric capacity requirements through natural gas-powered generation.¹⁸

**The use of natural gas to produce summertime electricity
has increased the demand for natural gas year-round.**

The use of natural gas to produce summertime electricity has increased the demand for natural gas year-round. Historically, the price of natural gas declined when the heating season ended, as prices dipped, gas utilities typically filled their storage for the winter with lower priced summer-season gas. Filling the storage tanks and pipeline storage in the non-heating season allowed the utilities to obtain lower gas prices and mitigate price volatility experienced during the heating season.

With increased year-round demand for natural gas, prices are remaining higher throughout the year. Thus, gas utilities are finding fewer opportunities to purchase and store lower-cost gas to offset prices during the heating season. Table 2 details the amount of natural gas consumed by the U.S. and the state of Indiana for the production of electricity in 2007.

¹⁶ Source: EIA Annual Energy Outlook 2002 With Projections to 2020

¹⁷ Source: SNL.com, “SNL Interactive: Historic & Future Power Plant Capacity, All Regions.”

¹⁸ Source: SNL.com, “SNL Interactive: Historic & Future Power Plant Capacity, Indiana.”

Table 2 – Natural Gas Consumed in 2007 to Generate Electricity

	Natural Gas Consumed (Dth) ¹⁹	Electricity Produced from Natural Gas (Thousand Megawatt Hours) ^{20, 21}	Total Electricity Produced (Thousand Megawatt Hours) ^{20, 22}	Percent of Total
U.S.	6,874,082,000	893,211	4,159,514	21%
Indiana	42,475,000	4,088	130,728	3%

Choice Program

One LDC is offering customer alternatives for selecting a natural gas supplier, which may allow pricing opportunities for participating customers. The Commission approved NIPSCO’s natural gas choice pilot program, referred to as “NIPSCO Choice” pursuant to the October 8, 1997 Order in Cause No. 40342. NIPSCO is the only Indiana LDC offering residential customers the option of choosing an alternative natural gas supplier. NIPSCO continues to own and maintain the distribution facilities and deliver natural gas to customers’ homes or businesses whether the gas is provided by an alternative supplier or by NIPSCO.

Currently, twelve alternative suppliers are registered with the Commission as natural gas marketers in the NIPSCO Choice program.

For informational purposes, alternative natural gas suppliers are required to register with the Commission. Currently, twelve alternative suppliers are registered as natural gas marketers in the NIPSCO Choice program. These suppliers are listed on the Commission and NIPSCO websites for interested customers. As of June 30, 2008, approximately eleven percent of residential customers and roughly 23 percent of commercial customers had selected alternative suppliers for their natural gas needs (Table 3).

¹⁹ http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_veu_mmc_f_a.htm

²⁰ http://www.eia.doe.gov/cneaf/electricity/epm/table1_1.html

²¹ http://www.eia.doe.gov/cneaf/electricity/epm/table1_10_b.html

²² http://www.eia.doe.gov/cneaf/electricity/epm/table1_6_b.html

Table 3 – Status of NIPSCO Choice Program

As of 7/31/2006	Residential	Commercial
Total Customers	647,309	55,749
Choice Customers	48,368	12,097
% of Total Customers	7.5%	21.7%
As of 6/30/2007		
Total Customers	653,145	56,552
Choice Customers	50,802	12,270
% of Total Customers	7.8%	21.7%
As of 6/30/2008		
Total Customers	653,124	56,913
Choice Customers	73,066	12,828
% of Total Customers	11.2%	22.5%

New Gas Operators

In the recent past, local gas drilling and production activity has been limited due to its cost. However, under current market conditions, locally produced gas is more cost-effective. As a result, the Department of Natural Resources (DNR) Oil and Gas Division has issued over 400 permits to drill for gas or oil in Indiana. With the assistance of DNR, Pipeline Safety conducts site visits for preliminary assessment of each operation. These visits and discussions are necessary to determine the nature of the operation, jurisdictional authority and operator status.

In 2007, Pipeline Safety identified nine potentially new operators who may be jurisdictional. Further review is necessary to determine their status, based on how each gathers its product and distributes it to customers. This effort will continue as companies continue to search for oil and gas in the state.

State Legislation – Senate Bill 529

Senate Bill 529²³ became law following the 2007 legislative session. This bill required Pipeline Safety to develop voluntary construction guidelines for all pipeline companies engaged in the construction, reconstruction, improvement, maintenance or

²³ Codified under I.C. § 8-1-22.6

extension of an interstate pipeline project on privately owned land. All pipeline companies proposing to construct a pipeline in the state receives the guidelines along with affected landowners, encouraging use of the guidelines to simplify easement negotiations. The pipeline company is expected to notify landowners who will be affected by the construction under I.C. § 32-24-1-3(g), and further, to provide the Commission with a list of those same landowners. These guidelines were published in the Indiana Register prior to the statutory deadline of September 1, 2007.

To date, the only interstate pipeline project in the state that falls under the requirements of this bill is the Rockies Express Pipeline. The Federal Energy Regulatory Commission issued its final Environmental Impact Statement on the Rockies Express East project, with construction expected to begin this summer in Indiana. Pipeline Safety will work with the Pipeline and Hazardous Material and Safety Administration (PHMSA) in overseeing construction of the pipeline.

Indiana 811 – “Call Before You Dig” – Damage Prevention

The core purpose of Indiana 811 is to provide for safe excavation from initial notification through excavation. This effort must include all stakeholders’ involvement from policy making to implementation for the program to succeed.

The Pipeline Integrity, Protection, Enforcement, and Safety Act of 2006 (PIPES Act) established nine specific elements to be included in an effective damage prevention program. Indiana has incorporated many of the required elements but has not implemented all of the elements yet. While the core purpose of Indiana 811 is to provide for safe excavation from initial notification through excavation, this effort must include all stakeholders’ involvement from policy making to implementation for the program to succeed. The elements of the PIPES Act are as follows:

Element 1 – Participation by operators, excavators and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between

stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate.

Element 2 – *A process for fostering and ensuring the support and partnership of stakeholders including excavators, operators, locators, designers and local government in all phases of the program.*

Element 3 – *A process for reviewing the adequacy of a pipeline operator's internal performance measures regarding persons performing locating services and quality assurance programs.*

Element 4 – *Participation by operators, excavators and other stakeholders in the development and implementation of effective employee training programs to ensure that operators, the one-call center, the enforcing agency, and the excavators have partnered to design and implement training for the employees of operators, excavators and locators.*

Element 5 – *A process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.*

Element 6 – *A process for resolving disputes that defines the State authority's role as a partner and facilitator to resolve issues.*

Element 7 – *Enforcement of State damage prevention laws and regulations for all aspects of the damage prevention process, including public education and the use of civil penalties for violations assessable by the appropriate State authority.*

Element 8 – *A process for fostering and promoting the use, by all appropriate stakeholders, of improving technologies that may enhance communications, underground pipeline locating capability, and gathering and analyzing information about the accuracy and effectiveness of locating programs.*

Element 9 – A process for review and analysis of the effectiveness of each program element, including a means for implementing improvements identified by such program reviews.

Indiana 811 does not have a formalized process in place for facilitating communication meetings between the excavator and facility owner. However, when Indiana 811 learns of a large project or is in contact with a facility owner and/or a contractor regarding a future project, Indiana 811 offers assistance. Indiana 811 has participated in several large projects, working directly with facility owners, contractors and those affected by a project, but Indiana 811 is working to enhance its capability to provide for coordination amongst all stakeholders during the project design phase.

Although Indiana 811 does not have a formalized process for handling mis-marks or the discovery of an unmarked facility, the Contractor Handbook provides instructions to contractors and training opportunities regarding contacting Indiana 811 whenever there is a concern before, during or after digging. Indiana 811 does require an operator to keep records of locates and provides regular training for locators even though Indiana does not have a process regarding the adequacy of a pipeline operator's internal processes. While some operators do have internal auditing of the locate process, Pipeline Safety inspectors regularly verify current locate ticket information when conducting construction inspections.

Currently, Indiana has no formalized process for dispute resolution with regard to damage prevention nor does Indiana have any provisions for enforcement of its law, other than the ability to sue for treble damages. Yet, while Indiana 811 regularly reviews call center statistics, membership levels and recent damage information as reported to the 811 Center, the long-term plan is to establish an effective damage prevention program, improve data collection and develop a program that includes all nine elements. This may require future state legislative action.

III. INFRASTRUCTURE INVESTMENT

Interstate Pipeline - Rockies Express

The Rockies Express Pipeline (REX) is a major interstate pipeline project that begins in Rio Blanco County, Colorado and will end in Monroe County, Ohio, costing approximately \$4.4 billion. The proposed route will traverse the counties of Vermillion, Parke, Putnam, Hendricks, Morgan, Johnson, Shelby, Decatur and Franklin. The joint developers of this project are Kinder Morgan Energy Partners, L.P.; Sempra Pipelines and Storage, a unit of Sempra Energy; and ConocoPhillips.²⁴

**The proposed routing through Indiana may allow diversification
of Indiana's natural gas sources of supply.**

Upon completion, REX will be the largest natural gas pipeline in North America, spanning nearly 1,700 miles with a capacity of 1.8 billion cubic feet (Bcf) per day. Moreover, REX will link natural gas supplies in the Rocky Mountains to major markets in the upper Midwestern and Eastern portions of the U.S. Historically, there has been a substantial price disparity between Rocky Mountain gas and gas supplies in the Eastern U.S. The proposed routing of REX through Indiana may allow diversification of Indiana's natural gas sources of supply.

The REX pipeline system will be comprised of three sections: 1) Rockies Express–Entrega (REX-Entrega); 2) Rockies Express–West (REX–West); and 3) Rockies Express–East (REX–East). Rex-Entrega is a completed 328-mile pipeline running throughout Colorado. The REX-West project, sprawling 713 miles²⁵ from Weld County, Colorado to Audrain County, Missouri²⁶ began full service on May 20, 2008. The REX-East portion of the project will be approximately 638 miles and extend from Missouri to Ohio, passing through Indiana in 2008. FERC's environmental staff concluded that the

²⁴ Preliminary Determination of Non-Environmental Issues; FERC Docket No. CP06-354

²⁵ http://www.rexpipeline.com/docs/rex_inserviceupdate0516.pdf

²⁶ http://www.rexpipeline.com/index_west.html

Rockies Express East Project, with recommended mitigating measures, would result in limited adverse environmental impact.²⁷ REX-East is the last segment, with interim service expected to begin on December 30, 2008.²⁸ The pipeline is to be operational by June 2009.²⁹

Storage & Liquefied Natural Gas (LNG) Facilities

**Recent increases in gas-fired power generation have resulted
in increased usage of natural gas during the summer.**

Underground natural gas storage usage may effectively balance a variable market with a supply source of natural gas. These facilities are warehouses providing a ready supply of natural gas to serve during peak demand. Generally, more natural gas usage occurs during the winter because of residential heating. Typically, natural gas is injected into storage fields during the summer (April – October), and withdrawn in the winter (November – March). However, recent increases in gas-fired power generation have resulted in increased usage of natural gas during the summer.³⁰

There are generally three types of underground storage facilities: depleted reservoirs in oil and/or gas fields, aquifers and salt cavern formations. The two most important aspects of underground storage are capacity and the rate at which gas inventory is withdrawn. Currently, there are eight operational storage fields utilized in Indiana.

In addition to underground storage, natural gas can be stored as LNG. LNG allows natural gas to be transported and stored in liquid form. The biggest advantage of LNG is that its volume is one six hundredth that of gaseous natural gas.³¹ LNG production occurs by liquefying gas taken from a well or a pipeline, storing it and then regasifying it for pipeline distribution to customers when demand is high, such as on cold winter days.

²⁷ FERC 4/11/08 Press Release, <http://www.ferc.gov/industries/gas/enviro/eis/2008/04-11-08.asp>

²⁸ FERC will act as the lead agency, coordinating the participation of other agencies, federal and state.

²⁹ <http://www.rexpipeline.com/docs/04-30-07-REX-East-Filing.pdf>

³⁰ <http://www.ferc.gov>

³¹ <http://www.naturalgas.org/lng/lng.asp>

These regasification plants are often called “peak shaving plants.” Alternatively, specially designed trucks may transport LNG to small facilities, “satellite plants”, where it is stored and regasified as needed. There are four LNG peak shaving plants throughout Indiana.³²

While LNG is costly to produce, advances in technology are reducing the costs associated with the liquification and regasification of LNG. These advances improve the ability for adequate storage for mitigating price volatility that benefits all parties. One gallon of LNG is equal to approximately 8.8 therms. In translation, an average single-family home in Indiana for one month during the winter heating season would use about 17 gallons of liquid natural gas.

Ethanol (Pipeline Quality)

In August 2007, PHMSA issued a federal register notice to affirm that transport of ethanol and biofuels will be subject to pipeline safety regulations.

In order to meet the President’s alternative energy goals, PHMSA believes that pipelines must be available to transport ethanol safely. In August 2007, PHMSA issued a federal register notice to affirm that transport of ethanol and biofuels will be subject to pipeline safety regulations. Currently there are a number of initiatives in place to address safety and technological challenges relating to possible incompatibility of large quantities and concentrations of biofuels with existing pipeline materials. Overcoming challenges will require long-term research to understand what additional mitigation strategies might be necessary to transport such products through existing pipelines and how new pipelines might be designed or modified in order to transport ethanol-rich products. Several research and development projects are underway and work has already begun to provide guidance and training for emergency responders to deal with the unique properties of such fuels. Indiana, as an ethanol-producing state, can expect to be impacted by this

³² IURC Pipeline Safety Division

initiative. Pipeline Safety is working closely with federal and state partners to understand the issues relating to transporting these materials via pipeline.

IV. FEDERAL ISSUES

Energy Policy Act of 2007

Prior to effective date of the Energy Independence and Security Act of 2007, the Commission issued orders fulfilling most requirements of the act by approving decoupling mechanisms and energy efficiency programs.

The Energy Independence and Security Act of 2007 (EISA) was signed into law on December 19, 2007. EISA provisions promote energy independence in the United States by increasing energy efficiency measures and increasing usage requirements for clean renewable fuels. The requirement in Title V, The Energy Savings in Government and Public Institutions, affects the Commission by amending the Public Utility Regulatory Policies Act of 1978. This amendment requires natural gas utilities to adopt policies that establish energy efficiency as a priority in the utilities' business operations and planning processes. This includes regulatory agencies evaluating modification to rate design and providing for the following:

- Instituting decoupling programs;
- Creating incentives for utilities to successfully manage energy efficiency programs; and
- Adopting rate designs promoting energy efficiency in each customer class.

Prior to EISA's effective date, the Commission issued orders fulfilling most requirements of the act by approving decoupling mechanisms and energy efficiency programs.³³

³³ In Cause Nos. 42943 & 43046, the Commission approved an energy efficiency program in the December 1, 2006 order. In Cause No. 43051, the Commission approved an energy efficiency program in the May 9, 2007 order. In Cause No. 42767, the Commission approved an energy efficiency program in the August 29, 2007 order.

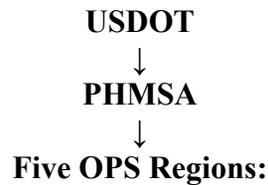
Pipeline Safety – Federal Role and Organizational Structure

This framework promotes pipeline safety through exclusive federal authority for regulation of interstate pipeline facilities and federal delegation to the states for all or part of the responsibility for intrastate pipeline facilities under annual certification or agreement.

The Pipeline Safety Act of 1968 established the federal Pipeline Safety Program. Chapter 601 of Title 49 of the United States Code (49 U.S.C. Chapter 601) provides the statutory basis for the pipeline safety program and establishes a framework and organizational structure for the federal/state partnership. This framework promotes pipeline safety through exclusive federal authority for regulation of interstate pipeline facilities and federal delegation to the states for all or part of the responsibility for intrastate pipeline facilities under annual certification or agreement. Chapter 601 authorizes federal grants-in-aid for up to 50 percent of a state agency's personnel, equipment and activity costs for its pipeline safety program. The resulting federal/state partnership is the cornerstone for ensuring uniform implementation of the pipeline safety program nationwide.

The United States Department of Transportation (USDOT) Pipeline and Hazardous Material Safety Administration (PHMSA) Office of Pipeline Safety (OPS) is responsible for protecting the people and the environment in the U.S. through a comprehensive pipeline safety program. Under delegation from the Secretary of the USDOT, OPS directly administers the program and develops, issues and enforces minimum safety regulations for interstate and intrastate pipelines. These regulations ensure safety in the design, construction, testing, operation and maintenance of pipeline facilities and the siting, construction, operation and maintenance of LNG facilities. The OPS ensures compliance with regulations through operator inspections, enforcement actions and accident investigations. In addition, the PHMSA/OPS Office of Training and Qualification conducts training in application of the regulations. The OPS also administers grant-in-aid funding to states, conducts research, and collects and analyzes safety data.

The OPS Headquarters, located in Washington, D.C., supports the work of the five OPS Regional Offices. The OPS Regional Offices serve as the focal point for federal compliance activities. The OPS also provides technical assistance, support to state agency programs and conducts an annual evaluation of state programs. The federal program structure is as follows:



Western, Southwestern, Central, Southern, Eastern

Each region includes a number of state pipeline safety programs. Indiana is in the Central Region, along with Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. The Central Region’s headquarters is in Kansas City, Missouri.

Indiana Pipeline Safety Program

Indiana participates in the pipeline safety program through the voluntary submission of a certification pursuant to Section 60105 of Chapter 601. Under this certification, the Commission assumes safety responsibility with respect to intrastate facilities to which it has jurisdiction under state law (submissions for gas and hazardous liquid programs are separate certifications). The state may adopt additional or more stringent standards for intrastate pipeline facilities, provided such standards are compatible with federal regulations.

Participation may also include acting as an interstate agent on behalf of USDOT. In such cases, the state assumes inspection responsibility for all interstate facilities and reports probable violations to OPS for compliance action. Indiana does not currently act as an interstate agent for either gas or liquid.

Program Description

In 2007, Pipeline Safety conducted 846 inspections and resolved 117 probable violations.

Pipeline Safety administers the Indiana Pipeline Safety program, established by statute.³⁴ Pipeline Safety completes a minimum of one in-depth inspection of each gas pipeline operator annually and covers 50 percent of each operator's inspection units every year. These inspections may cover operating procedures, operating records, specialized inspections, follow-up inspections, field inspections, operator training, or any combination of these. An operator receives a written notice upon discovery of a probable violation and is subject to additional enforcement as needed. In 2007, Pipeline Safety conducted 846 inspections and resolved 117 probable violations.

Pipeline Safety also investigates possible new operators, determines jurisdictional authority and incorporates new operators into the program. Pipeline Safety conducts an investigation of each pipeline accident reported to the National Reporting Center. Most often, the investigations are on-site unless the incident is determined to be non-jurisdictional. A written report follows the completion of an investigation.

As part of its responsibilities, Pipeline Safety promotes the prevention of damage to underground facilities. It also promotes the education of public and emergency officials/responders in recognizing, reporting, and responding to gas-related emergencies, and conducts training sessions for pipeline operators in the state. Pipeline Safety maintains records for each operator, inspection and compliance action. Records include but are not necessarily limited to inspection records, correspondence and compliance actions, incident reports, and annual reports (both state and federal, including unaccounted-for gas and reports of construction projects).

³⁴ I.C. § 8-1-22.5

Distribution Integrity Management Program (DIMP)

PHMSA issued a Notice of Proposed Rulemaking this year regarding Distribution Integrity Management Programs (DIMP) for LDC's. The work for issuance of the distribution rule began in earnest in 2004 with contributions from PHMSA, industry representatives and independent trade organizations, including the American Gas Association (AGA) and the American Public Gas Association (APGA). The DIMP rule addresses the requirement from Congress that natural gas operators have a plan and procedures in place to verify and strengthen the integrity of their natural gas distribution systems. PHMSA's Report to Congress, "Assuring the Integrity of Gas Distribution Pipeline Systems," dated June 20, 2005, includes the following:

The operator shall develop a program plan that describes how it manages the integrity of its distribution system, focusing on how it will satisfy the requirements below:

- The operator shall identify threats applicable to its system;
- The operator shall characterize the relative significance of applicable threats to its piping system;
- The operator shall identify and implement appropriate practices (or modify current practices) to prevent, and mitigate the risk from applicable threats consistent with the significance of these threats;
- The operator shall develop and monitor performance measures to allow it to evaluate the effectiveness of improvements implemented;
- The operator shall periodically evaluate the effectiveness of its program and make adjustments dictated by its evaluation; and
- The operator shall periodically report to the jurisdictional regulatory authority a select set of performance measures.

The elements above that mention threat identification, risk prevention and mitigation practices and program effectiveness evaluation mirror requirements found in the integrity management rule for transmission pipelines. This rule for distribution systems, however, does not include direct assessment practices because in most cases this would be impractical. Pipeline Safety expects a greater emphasis on cathodic protection systems to

reduce or eliminate corrosion on steel pipelines, public awareness programs and damage prevention programs resulting from this rule. In addition, beginning June 1, 2008, operators are required to install excess flow valves (EFV) on all new and replacement natural gas services to residences that operate above ten pounds per square inch gauge pressure (psig). Excess flow valves are designed to automatically stop gas flow in the event of a break between the valve and the house. Although PHMSA has not issued a rule to comply with the provision of the law, Pipeline Safety has advised Indiana operators of the requirement and most operators are currently installing such valves.

Pipeline Integrity, Protection, Enforcement and Safety (PIPES) Act of 2006 – Push for Damage Prevention

The PIPES Act of 2006 sets forth nine elements (discussed previously in this report) to be included in state damage prevention programs. The extent to which states comply with these nine elements or have a program to implement the elements, directly affects the pipeline safety program and potentially the owners of underground infrastructure in the state. Since Indiana's damage prevention program lacks key elements outlined in the PIPES Act, collaborative work is required among all stakeholders, including facility owners, the Indiana 811 (Indiana's Call-Before-You-Dig), excavators, locators, regulators and legislators to develop and implement a damage prevention program that incorporates all the elements described in the program. Absent a successful effort in this area, Indiana may fail to qualify for additional funding available through the PIPES Act and could possibly face federal action implementing a program within the state.

Indiana has taken the first step toward developing a plan to implement the nine elements, applying for and receiving a \$100,000 State Damage Prevention grant. This money designated in the PIPES Act is specifically for use by states to implement the nine elements for an effective damage prevention program. Pipeline Safety has worked closely with Indiana 811 to develop a program that incorporates random quality control-type checks of the excavation process and organized outreach at the grassroots level to discuss the importance of an effective statewide damage prevention program. The Commission will contract with Indiana 811 to implement the program as a first step to

compliance with the requirements of the PIPES Act, and work in other areas, including enforcement legislation, will be necessary to meet all requirements.

Funding Act – User Fees

The PIPES Act authorized an increase in the state matching grants program payment rate from 50% to 80% to cover additional costs of implementing legislative and regulatory mandates in 2006. Major funding for PHMSA, including state grants, comes from annual user fee assessments on liquids and gas transmission pipeline mileage. These higher grant payments may lead to an increase in user fees. While interstate pipelines have objected to such an increase due to deep discounting of the cost of fuel to low margin customers and the avoidance of rate cases before FERC, the interstate pipeline companies have absorbed the user fees. Increasing user fees would further cut into their bottom line. Congress has directed PHMSA to “review the user fee collection process to determine if it should be modified to more equitably allocate the cost of the pipeline safety program across the industry segments covered by federal and state oversight”.

In order to offset these costs, the interstate gas pipeline companies have encouraged PHMSA to apply the collection of increased user fees to the distribution sector in addition to the transmission sector. The interstate companies argue that the proposed increase in state grants funded by increased user fees will mostly benefit intrastate systems – rather than interstate systems. The options for consideration by industry and government stakeholders for collecting increased user fees include:

1. Leave the allocation of the collection of increased user fees unchanged (i.e., based on transmission pipeline mileage);
2. Assess a no-waiver volumetric transportation surcharge on the cost of gas sold by the interstate companies to be collected by the interstate companies by passing it through to their downstream customers and by adjusting via a FERC Tracker type of accounting mechanism;

3. Assess a Federal user fee on distribution system mileage directly on distribution system operators (a variation of this may be a user fee based on the number of gas customers); or
4. Increase state user fees to cover the needed increase in state funds.

The Commission will monitor all program funding proposals and activity. Certainly, the implementation of options 3 or 4 would present cost recovery challenges to Indiana's distribution operators and their customers.

V. APPENDICES

Appendix A – Gas Utility Revenues

Gas Utility Revenues
Year Ended December 31, 2007

Utility Name	Revenues	Percentage of Total Revenues
Northern Indiana Public Service Co. - Gas	\$1,006,857,972	39.69%
Indiana Gas Company, Inc.	762,858,101	30.07%
Citizens Gas & Coke Utility	407,400,791	16.06%
Southern Indiana Gas and Electric Company - Gas	133,034,542	5.24%
Northern Indiana Fuel & Light Co., Inc.	49,651,894	1.96%
Kokomo Gas and Fuel Company	46,782,371	1.84%
Ohio Valley Gas Corporation	40,285,385	1.59%
Midwest Natural Gas Corporation	21,044,713	0.83%
Lawrenceburg Gas Company	13,717,202	0.54%
Indiana Natural Gas Corporation	9,871,623	0.39%
Community Natural Gas Co., Inc.	8,648,258	0.34%
Ohio Valley Gas, Inc.	6,940,725	0.27%
Fountaintown Gas Company, Inc.	5,636,488	0.22%
Indiana Utilities Corporation	5,356,657	0.21%
Boonville Natural Gas Corporation	4,940,852	0.19%
Citizens Gas of Westfield	4,819,238	0.19%
Aurora Municipal Gas Utility	3,467,687	0.14%
South Eastern Indiana Natural Gas Co., Inc.	2,404,221	0.09%
Switzerland County Natural Gas Co.	1,734,286	0.07%
Chandler Natural Gas	1,206,121	0.05%
Valley Rural Utility Company	383,844	0.02%
Snow & Ogden Gas Company, Inc.	12,760	0.00%
Total	\$2,537,055,731	100.00%

*Data taken from 2007 Annual Reports filed with the Commission

Appendix B – Residential Gas Bill Analysis

Residential Gas Bill Analysis (2004-2008)

Bills Calculated Based on Rates in Effect on January 1st of Each Year

Utility Name	2008 Bills	2007 Bills	2006 Bills	2005 Bills	2004 Bills
Aurora Municipal Gas	\$228.55	\$261.15	\$338.94	\$240.59	\$205.25
Boonville Natural Gas	253.30	295.50	310.11	219.08	196.18
Chandler Natural Gas	220.26	272.24	292.09	191.54	171.08
Citizens Gas	201.60	225.48	242.99	190.49	167.85
Citizens Gas of Westfield	223.61	231.35	262.97	193.87	204.97
Community Natural Gas	213.84	259.70	286.17	206.08	199.96
Fountaintown Gas	227.18	284.26	240.55	239.98	139.58
Indiana Gas Company (Vectren North)	207.68	222.64	289.58	209.70	179.40
Indiana Natural Gas	231.69	255.25	301.16	204.41	208.96
Indiana Utilities	249.16	277.87	290.98	238.26	209.20
Kokomo Gas and Fuel	197.42	189.58	227.66	182.98	165.80
Lawrenceburg Gas	262.64	264.60	343.38	248.34	213.09
Midwest Natural Gas	232.43	255.12	293.04	195.12	205.12
Northern Indiana Fuel & Light (NIFL)	201.39	201.15	220.71	187.95	170.11
Northern Indiana Public Service Co. (NIPSCO)	205.10	181.64	295.08	199.70	181.31
Ohio Valley Gas Corp. (ANR) *	264.06	269.02	264.24	227.40	225.70
Ohio Valley Gas Corp. (TXG) *	282.10	280.18	286.74	235.80	220.18
Ohio Valley Gas, Inc. *	251.58	268.60	276.84	217.56	223.52
Snow & Ogden Gas	148.10	148.10	148.10	100.20	100.20
Southern Indiana Gas and Electric Co. (Vectren South)	221.57	213.04	290.30	171.72	154.84
South Eastern Indiana Natural Gas Co.	222.08	271.62	266.45	250.45	211.19
Switzerland County Natural Gas	218.00	292.82	382.34	173.19	173.19
Valley Rural Utility Company (1)	291.80	318.67	362.55	247.95	220.35
Industry Average	\$228.48	\$249.55	\$283.17	\$207.49	\$189.00

Using this analysis to draw conclusions about a particular utility's performance would be difficult due to many factors such as utility size and resources, time since the last rate case, storage options, geographic location, base rates, customer density and gas cost adjustment in effect at the time of the bill calculations. Rates do not include NTA.

*AREAS SERVED

Ohio Valley Gas Corp.

ANR Pipeline Service Area

Serving: Bretzville, Ferdinand, Maltersville, St. Anthony, St. Marks, and other rural areas in Dubois County; Bluff Point, Center, College Corner, Pennville, Portland, and other rural areas in Jay County; Deerfield, Harrisville, Haysville, Lynn, Ridgeville, Saratoga, Union City, Winchester, and other rural areas in Randolph County; St. Meinrad, and other rural areas in Spencer County; and Fountain City and other rural areas in Wayne County

Texas Gas Service Area

Serving: Dover, Guilford, Lawrenceville, Logan, New Alsace, St. Leon, Yorkville, and other rural areas in Dearborn County; Connersville, Everton, Lyonsville, Springersville, and other rural areas in Fayette County; rural areas in Franklin County; Cannelton, St. Marks, Tell City, Troy, and other rural areas in Perry County; Clinton Corners, Negangard Corner, Penntown, Sunman, and other rural areas in Ripley County; rural areas in eastern Spencer County west of Troy; and Brownsville, Liberty, and other rural areas in Union County

Ohio Valley Gas, Inc.

Serving: rural areas in Greene and Knox counties; Arthur, Ayrshire, Campbelltown, Winslow, and other rural areas in Pike County; Cass, Curryville, Dugger, Farmersburg, Hymera, New Lebanon, Shelburn, Sullivan, and other rural areas in Sullivan County; and Blackhawk, Riley, and other rural areas in Vigo County



Electricity

2008 ELECTRICITY REPORT

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I. ELECTRICITY INDUSTRY OVERVIEW

Industry Structure

The Indiana Utility Regulatory Commission (IURC or Commission) sets retail rates for electric investor-owned utilities (IOUs) and some cooperatives and municipals. In addition, Indiana's electric utilities are required to receive Commission approval before they construct generating facilities. The Commission also reviews long-term financing for IOUs, Indiana Municipal Power Agency (IMPA) and Wabash Valley Power Association (WVPA). Although rural electric membership cooperatives (REMCs) and individual municipal electric utilities are not required to obtain prior approval for financing, the Commission indirectly reviews financing via rate cases. State law allows municipal and cooperative utilities to remove themselves from the Commission's jurisdiction. To date, 60 municipal and 39 cooperative electric utilities have withdrawn from the Commission's jurisdiction.

The IURC has jurisdiction over electric service to over 2.6 million electric customers in Indiana. As of February 2008, Indiana's average residential rates are the 14th lowest in the nation.

Indiana consumers receive electric service from 117 electric utilities. The Commission regulates 25 of these utilities, which generated more than \$7.6 billion in revenue last year and served more than 2.6 million electric customers. As of February 2008, Indiana's average residential rates are the 14th lowest in the nation¹, as compared to the 11th lowest for a similar period last year. The difference in ranking is likely due to the timing of rate case increases and fuel adjustment charges in Indiana and other states. Neighboring states' average residential rates for the same period rank as follows: Kentucky 6th, Ohio 26th, Illinois 31st and Michigan 32nd.²

¹ Energy Information Administration - Table 5.6B Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through February 2008.

² Ibid.

Five major IOUs operate in the state of Indiana. IOUs are for-profit enterprises funded by debt and equity. Indiana's IOUs are vertically integrated; they own facilities for generation, transmission and distribution. These utilities are the most significant in terms of generation and the number of customers served, accounting for over 90% of the electric power sales made by the state's regulated electric utilities to Indiana retail customers. The five IOUs operating in Indiana, listed in descending order of 2007 total operating revenue, are:

- Duke Energy Indiana, Inc., a subsidiary of Duke Energy Corporation;
- Indiana Michigan Power Company (I&M), a subsidiary of American Electric Power Company, Inc. (AEP);
- Northern Indiana Public Service Company (NIPSCO), a subsidiary of NiSource Inc.;
- Indianapolis Power and Light Company (IPL), a subsidiary of The AES Corporation; and
- Southern Indiana Gas & Electric Company (SIGECO), a subsidiary of Vectren Corp.

As of July 2008, 16 of the 72 municipally-owned utilities operating in Indiana remain under Commission jurisdiction for rate regulation. Furthermore, 51 of Indiana's municipally-owned electric utilities are members of IMPA, 11 of which are regulated by the Commission. IMPA was created by a group of municipalities in 1980 to jointly finance and operate generation and transmission facilities as well as to purchase wholesale power and meet members' needs through a combination of owned generating facilities, member-dedicated generation and purchased power. The Commission does not regulate the rates that IMPA charges its members.

As of July 2008, four of the 40 electric distribution cooperatives operating in Indiana remain under Commission jurisdiction for rate regulation. Most of the distribution cooperatives are members of either Hoosier Energy Rural Electric Cooperative (Hoosier Energy) or WVPA. These two organizations are power generating and transmission cooperatives formed to supply power to distribution cooperatives. The IURC regulation

of both Hoosier Energy and WVPA is limited to decisions to purchase, build, or lease generation facilities, and long-term financing, with respect to WVPA.

II. STATE ISSUES OF INTEREST

Credit Rating

Indiana utilities require external financing to build infrastructure necessary to meet forecast electric demand and to comply with environmental regulations. It is important that utilities are able to access capital markets and readily obtain both debt and equity financing at a reasonable cost.

A credit rating is a private agency's (S&P, Moody's, Fitch) opinion of a company's financial strength based upon an analysis of both qualitative and quantitative factors when assessing a utility's financial and business risk. A company's rating reflects its ability to repay debt and provide investors with a fair return on their capital. Hence, a utility's credit rating can affect the terms upon which a utility obtains financing, which, in turn, affects the rates paid by customers.

When determining credit ratings, the regulatory environment of a utility is a key factor. The Indiana Commission is well-regarded by the financial community.

When determining credit ratings, agencies consider a utility's regulatory environment, management and business strategy, and access to power or gas supply with recovery of associated costs. The regulatory environment of a utility is a key factor because state commissions generally determine a utility's retail rates as well as its terms and conditions of service. The Indiana Commission is well-regarded by the financial community. As a creature of statute, any review of the Commission's performance is based on a combination of Indiana statutes and the manner in which the Commission applies them. Specific issues considered when assessing regulation include:

- Sound utility statutes that equitably balance the myriad interests;
- Regulatory consistency with past commission policies and practices;

- Regulatory independence from the political process;
- Ability to fairly balance the competing interests of ratepayers and investors; and
- Sound economic decisions that recognize the necessity of new investments.

Four of the five Indiana IOUs have mid-quality or better investment grade S&P credit ratings, which helps to reduce borrowing costs, thus lowering the price ultimately paid by Indiana customers.³ For example, a reduction in the interest rate from 8% to 7.5% lowers the monthly carrying cost of a \$1 billion project by approximately 2.3%.

Auction Rate Securities

In February 2008, the subprime mortgage crisis found its way to the utility industry via a debt instrument called an auction rate security. First used in 1984, these unique bonds permit issuers to borrow long-term debt at short-term interest rates. Securities dealers (often investment banks) conduct auctions every 7, 28 or 35 days to “reset” the bonds’ interest rates that are determined by the supply of and demand for the bonds on the auction date. An auction fails if supply exceeds demand.

Upon auction failure, interest rates automatically reset to a prescribed penalty rate, often two to three times the previous rate set at auction. For example, when the auctions for a large number of Duke Energy Indiana’s bond series recently failed, the interest rate reset at 1.75x LIBOR⁴ – more than four percentage points higher than a similar bond in non-auction rate mode.

Historically, if there were not enough interested buyers to absorb the supply of bonds available in the market, the auction dealer would step in and purchase the balance to avoid a failure. Only 13 auctions failed between 1984 and 2006. When the subprime crisis eliminated more than \$300 billion⁵ from the balance sheets of investment banks in late 2007 and early 2008, lenders became less willing to stabilize the \$330 billion

³ IPL’s S&P credit rating is below investment grade due to the financial characteristics of its parent corporation.

⁴ The London Interbank Offered Rate (LIBOR) is a daily derived average interest rate at which banks will lend between themselves in the London wholesale money market and is a commonly used reference rate in financial transactions.

⁵ Scott Hamilton, “HSBC to Make \$4.6 Billion Provision, Observer Reports,” Bloomberg, May 11, 2008.

auction-rate market⁶ with their capital. The rating downgrades of many of the bond insurers backing auction rate securities also had a chilling effect on the market. On February 20, 2008, 67% of auctions (almost 400) failed as investors pulled back from private debt and dealers conserved their remaining capital. The average rate on seven-day auctions jumped from 4% to 6.6% in one week.

Response by Indiana Electric Utilities

Shortly after the February failures, both Duke Energy Indiana and Indiana Michigan Power Co. requested and received approval from the IURC to convert over \$600 million of their auction rate debt to a fixed or variable rate mode. While these alternate debt instruments carry historically higher interest rates, they will serve to lower the companies' short-term carrying costs.

In March 2008, Vectren converted over \$100 million of outstanding auction rate mode bonds into daily interest mode bonds. As of January 2008, IPL had \$130 million of auction rate debt. In its 2007 Form 10-K, IPL stated that its weekly cash flows would decrease by approximately \$0.2 million if all the auctions fail and the penalty interest rate is imposed.

Four of NIPSCO's seven Jasper County Pollution Control Bond series experienced an auction failure in February 2008. The maximum default rates on these bonds were 15% - 18%. Subsequent auctions were successful but resulted in uncharacteristically high interest rates. NIPSCO converted all seven series (\$254 million) from the auction rate mode to a variable rate demand mode in March and April 2008. The utility then repurchased the entire series and is currently holding the bonds in its treasury as it considers reoffering the debt to the public in a fixed rate mode.

Environmental Regulations

In addition to the NOx SIP Call Rule, adopted in Indiana in 2001, the U.S. Environmental Protection Agency (EPA) adopted in 2005-2006 two major new rules applicable to Indiana utilities—the Clean Air Interstate Rule (CAIR) that imposed

⁶ Joan Gralla, "Buffett Says Bought \$4bln of Auction Rate Debt," Reuters, May 3, 2008.

additional regulations concerning nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and the Clean Air Mercury Rule (CAMR). In February 2008, the CAMR was vacated by the D.C. Court of Appeals; however, the decision is being appealed. In July 2008, the CAIR was vacated by the D.C. Court of Appeals; the Indiana Department of Environmental Management is assessing the status of the state rule. To date, Indiana's five IOUs have spent approximately \$1.3 billion to comply with CAIR. Table 1 shows the projected total capital costs for Indiana IOUs to comply with existing environmental regulations.

Table 1
Indiana IOU Costs of Compliance for NO_x SIP Call⁷ and CAIR/CAMR*

	NO _x SIP Call		CAIR/CAMR	
	Capital Costs	Annual O&M Costs	Capital Costs (estimates)	Annual O&M Costs (estimates unless noted)
Duke Energy Indiana	\$707,283,000	\$6,705,160	\$1,095,763,000	\$14,549,650**
I&M	\$24,300,000	\$3,500,000	\$111,500,000	\$26,000,000
IPL	\$229,624,000	\$3,142,000	\$342,212,000	\$10,794,000**
NIPSCO	\$315,005,246	\$4,717,314	\$23,460,000	\$11,400,000
SIGECO	\$257,724,331	\$6,190,058	\$140,570,074	\$347,120**
TOTALS	\$1,533,936,577	\$24,254,532	\$1,713,505,074	\$63,090,770

Source: Utility filings and communications with the Commission

* Capital expenditures for the NO_x SIP Call began in 2001; and began in 2007 for CAIR/CAMR.

** These amounts based on semi-annual filings with the Commission.

⁷ NO_x SIP Call is the common name for the 1998 EPA rule "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone."

Economic Development and Potential Impact of Future CO₂ Legislation on Indiana

*State Utility Forecasting Group 2007 Forecast*⁸

The 2007 SUFG Forecast predicts Indiana electricity prices to increase significantly in real (inflation adjusted) terms through 2010 (on average 4.33 %) and then slowly fall through the remainder of the forecast period.

The State Utility Forecasting Group (SUGF) issued its most recent projections of future electricity usage, peak demand, prices and resource requirements in December 2007 (2007 SUGF Forecast). The forecast projects electricity usage to grow at a rate of 2.46 percent per year over the 20-year forecasting period (2006-2025). This growth rate is slightly higher than the 2005 forecasted growth rate. Peak electricity demand is also projected to grow at an average rate of 2.46 percent annually.

The 2007 SUGF Forecast predicts Indiana electricity prices to increase significantly in real (inflation adjusted) terms through 2010 (on average 4.33%) and then slowly fall through the remainder of the forecast period. The price increase in the early years of the forecast is caused by two factors: (1) the cost of controlling emissions from coal-fired generation facilities to meet the Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR) and (2) higher purchase power costs.

As in the 2005 SUGF Forecast, the 2007 projections indicate a relatively balanced need for the three types of resources modeled: base load, cycling and peaking. Peaking resources are characterized by relatively low construction costs but high operating costs and are intended to be operated only during periods of high electricity usage. Base load generators, which are intended to be used even during periods of low demand, have relatively high construction costs but low operating costs. Cycling resources have construction and operating cost characteristics between those of peaking and base load resources. The 2007 SUGF Forecast identifies a need for 330 MW of peaking, 1,100 MW of cycling and 620 MW of base load resources by 2010. These requirements are

⁸ State Utility Forecasting Group, "Indiana Electricity Projections: The 2007 Forecast", December 2007.

somewhat lower than those identified in the 2005 SUFG Forecast, primarily as a result of new long-term power purchases by some of the Indiana utilities and an increase in projected interruptible loads.

Potential Impact of CO₂ Legislation

The U.S. Congress is currently debating whether and how to regulate greenhouse gas emissions to address the risk of global climate change. The primary greenhouse gas being discussed is carbon dioxide (CO₂), a major component of the exhaust gases emitted from coal and gas-fired power plants. The potential financial impact of federal CO₂ legislation on Indiana is difficult to estimate, as there is no “standard” control methodology for CO₂ emissions. Additionally, the emission allowance allocation methodology under a cap and trade system is uncertain.

Nevertheless, the SUFG has projected the average electricity price impacts of proposed CO₂ legislation.⁹ The Energy Information Administration (EIA) performed a comparable analysis for the same proposed legislation on a national level.

Table 2

Percent Change in Real Electricity Prices Relative to 2005

Year	EIA S280 National Price Analysis	SUFG Indiana Specific Price Analysis
2012	- 0.1%	17.8%
2015	3.7%	21.0%
2020	10.4%	33.6%
2025	14.8%	44.6%

As shown in Table 2, the SUFG’s preliminary estimates of the potential cost ramifications of CO₂ regulations on the price of electricity in Indiana range from

⁹ The SUFG price analysis used S.280, the Climate Stewardship and Innovation Act of 2007.

approximately 18% in 2012 to 45% in 2025.¹⁰ While such large increases are disconcerting, Indiana's standing as a relatively low-cost producer of electricity may not be significantly altered because the CO₂ regulations will also heavily impact other states that have a high dependence on coal. While electricity costs are still very important, they should be decreasing in importance as a primary determinant of economic development as Indiana's economy diversifies away from electricity-intensive, heavy industry.

Technological Developments and Efficient Electricity Use

Commission Investigation of Demand Side Management

The Commission is proceeding with a second phase of the investigation to seek input on the development of statewide policy objectives necessary to improve the existing approach to DSM in Indiana.

In April 2008, the Commission issued its Phase I order in the investigation into the level and overall effectiveness of demand side management (DSM) programs in the state. DSM means the planning, implementation and monitoring of a utility activity designed to influence customer use of electricity that produces a desired change in a utility's load shape. The first phase of the investigation largely involved an assessment of the current state of energy efficiency programs in Indiana. The Commission is proceeding with a second phase of the investigation to seek input on the development of statewide policy objectives necessary to improve the existing approach to DSM in Indiana and to develop a proposed path that will address the following issues:

- Current inconsistent patchwork of DSM programs;
- Low overall investment in DSM compared to other states (31st nationally per capita and 6th among seven Midwestern states);
- High energy consumption (6th nationally per capita);

¹⁰ Several factors that contribute to increased costs of producing electricity may affect the position of Indiana relative to other states and include increases in fuel prices, the need to replace aging infrastructure, and constructing new resources to meet growing demands for electricity. The forecast price increases for Indiana will vary by rate class and utility. The greatest impact occurs in the industrial sector, because this sector has the most nearly constant load profile, and therefore relies most heavily on baseload generators, *(footnote continued)*

- Additional benefits of increased DSM programs; and
- Consideration of an administrative delivery model for DSM programs.

Other related issues may also be considered, including smart metering standards, integrated resource planning and rate design modifications to promote energy efficiency. The Commission and the parties in the investigation will consider the issues in a series of technical workshops.

Existing DSM Programs

Indiana's electric utilities continue to operate their own DSM programs. Successful programs include load control (which remotely turns off appliances such as air conditioners and water heaters during times of peak electric use), weatherization programs for residential homes and apartments, and demand response programs such as interruptible rate programs for large industrial customers. Indiana's electric utilities have been collaborating with the Office of Utility Consumer Counselor in developing market potential studies for DSM, and some utilities have pending cases before the Commission that address potential DSM programs.

Advanced Metering and the Smart Grid

Although definitions of advanced metering and smart grid are still evolving, advanced metering technology generally refers to digital metering technology combined with one or two-way real-time communication of electricity demand between the customer's premises and the utility. The "Smart Grid" has been defined as a distribution system that allows for a flow of information from a customer's meter in two directions: both inside the house to thermostats, appliances, and other devices, and from the house back to the utility. The Smart Grid includes a variety of operational and energy capabilities including, but not limited to, advanced metering technology. Smart Grid definitions also include new devices to help utilities manage and modernize distribution and transmission systems.

which tend to be most impacted by CO₂ limitations. Also, since industrial rates are lowest, a given price increase will represent a larger percentage gain.

Advanced metering and Smart Grid technologies have many potential benefits including:

- Quicker outage detection, improved ability to determine the extent of the outage and a reduction or elimination of outage restoration callbacks;
- Ability to monitor customer satisfaction based on the availability of enhanced information to respond to customer inquiries regarding consumption;
- Expansion of tariff offerings such as time-of-use rates;
- Improved billing accuracy and better efficiency in generating bills;
- Remote connect and disconnection of service;
- Ability to detect meter tampering, theft and/or stopped meters;
- Labor and fuel savings realized by a reduction in the meter reading force;
- Reduced revenues written off due to inaccurate meter reads; and
- Reduced meter repair costs.

However, the potential benefits outlined above are not without cost. For example, an advanced meter costs significantly more than standard mechanical meters that have been in widespread use for decades. The Commission has not mandated the installation of advanced metering¹¹ but will continue to follow this issue as well as the development of the Smart Grid. Three Indiana utilities that have installed or are in the process of installing advanced metering technology for all of their customers include IPL, Anderson Municipal Light & Power Company and Harrison County REMC. Duke Energy Indiana filed for approval of a Smart Grid proposal on May 23, 2008.

Future Demand Response Programs

Demand response involves changes in electric usage by customers from their normal consumption patterns in response to changes in the price of electricity over time or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized. Implementation of demand response is dependent on the use of meters that can record a customer's electricity demand on an hourly or more frequent basis. Generally only large customers currently

have these types of meters, but the wide scale installation of advanced meters and smart grid technology will make participation by other customers more possible.

Many suggest that the effective use of demand response can reduce the number of peaking plants built, and, in turn, reduce the electricity rates or at least slow the rate of increase. Reduced peak demand also mitigates wholesale power prices. A relatively small reduction in demand from price-responsive customers can have a disproportionately favorable effect on the mitigation of wholesale power price spikes.

The Midwest ISO and the PJM Interconnection (PJM)¹² both operate a variety of demand response programs in order to encourage large electric customers to reduce their use of electricity at times of the system peak. The IURC has approved two large industrial customers for participation in the programs offered by the PJM.

Energy Efficient Buildings

Constructing energy efficient buildings saves money from the reduced use of energy. This is especially important since energy prices are forecast to increase significantly in the near future. The Commission notes that the somewhat out-of-date Indiana building code¹³ offers little incentive to build more efficient buildings. However, monetary incentives provided by utilities for employing energy efficiency measures in the construction of new buildings is a possible avenue through which energy consumption could be further reduced.

There are other resources available to aid in the design of “green” buildings. One such source is the U.S. Green Building Council (USGBC) program entitled Leadership in Energy and Environmental Design (LEED). The LEED program is designed to supply the tools one needs to plan, design, construct and operate high performance green buildings that have a positive impact on environmental, human and economic health. The program offers four levels of certification depending on the level of efficiency a

¹¹ See the discussion of Cause No. 43083 in Section IV of this report.

¹² The Midwest ISO and PJM Interconnection are the two regional transmission organizations that operate in Indiana. They are discussed further in Section IV of this report.

¹³ The Indiana Fire Prevention and Building Safety Commission enforces the Indiana Energy Code of 1992 as the commercial building code in Indiana.

building installs: certified, silver, gold and platinum. The LEED program measures achievement in sustainable site development, energy efficiency, indoor environmental quality, water conservation, materials and resources, innovation, and neighborhood planning. With the forecast increase in energy rates and the potential for legislation regarding CO₂ emissions, LEED and other programs like it should be considered by businesses planning to build or lease new structures. It is cheaper to install these efficiencies during construction than to retrofit buildings later. The Commission notes there are 10 certified and 109 registered LEED projects in Indiana.

On June 24, 2008, Governor Mitch Daniels signed an Executive Order that requires all new state government buildings to be designed, constructed, operated and maintained to achieve maximum energy efficiency to the extent this can be accomplished on a cost effective basis, considering construction and operating costs over the life cycle of the building. In addition, the repair or renovation of all existing state government buildings shall be designed to achieve maximum energy efficiency over the life cycle of the building. Efficiency may be demonstrated through design that achieves the silver rating under the LEED rating system or by employing other similar rating systems.

Adjustable Rate Mechanisms

**Indiana's regulatory statutes include adjustable rate mechanisms
(trackers) as an integral part of regulation.**

Indiana's regulatory statutes include adjustable rate mechanisms (trackers) for expenses and capital investments as an integral part of regulation. An expense tracker allows retail rates to be adjusted outside the context of a base rate case, to reflect changes in operating expenses and does not include a return on such expenses. Expenses which are characterized as largely outside the utility's control and materially significant are the intended target of such trackers.

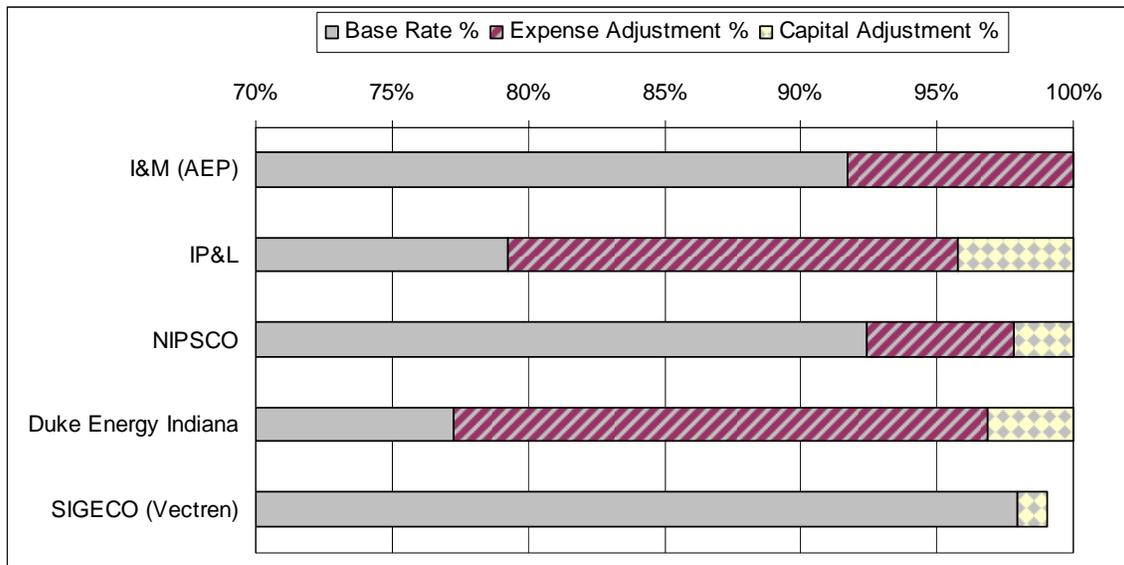
A capital investment tracker allows a utility to reflect certain clean coal and energy generation capital costs in its rate base and to reflect the associated return of and return

on such investment in retail rates outside a base rate case. This regulatory treatment significantly reduces the time lag between capital expenditure and commencement of recovery for the utility and is viewed by credit rating agencies as contributory to credit quality. Capital trackers have historically been utilized by utilities to support major investments in upgrading coal generation plants to comply with increasingly stringent environmental regulations. The Commission recently approved such treatment for a \$2 billion state-of-the-art coal gasification power plant near Edwardsport, Indiana.

The use of both expense and capital trackers have a favorable impact on credit ratings, the cost of capital for Indiana utilities and, therefore, on the rates customers pay.

Table 3 shows a breakdown of how base rates, expense adjustments and capital adjustments contribute to a residential customer’s bill. The makeup of these mechanisms varies in part due to the size of the utility, the magnitude of a company’s construction program and how much time has elapsed since the last base rate case.

Table 3
Indiana Investor-Owned Electric Utilities, July 1, 2008 Residential Billing
% of Bill Comparison



The fuel adjustment charge (FAC) has existed in Indiana for more than three decades and tracks a utility's largest variable and unpredictable operating expense. Other expenses tracked have expanded in recent years to include DSM, emission allowances, purchased power capacity, clean coal technology operation and maintenance (O&M), and Midwest ISO management expenses.

A more recent development has been the similar tracking of volatile revenue streams such as wholesale energy sales and transmission income. Direct pass-through of expense or revenue reflects current conditions in retail rates in a more real-time manner than traditional base rate case regulation. The pass-through of volatile revenues and expenses to ratepayers reduces volatility in the utility's earnings and may enhance credit rating agencies' assessment of the utility. The earnings volatility is, in essence, transferred from the utility's investors to the utility's ratepayers in the form of rate volatility.

Trackers, in the abstract, are neither inherently good nor bad. They are a tool utilized in the regulatory process. Rate cases have the regulatory virtue of examining the entire scope of a utility's operations during one test year and creating an appropriate balance among those many factors as well as harmonizing the company's operations with its current operating conditions. A full rate case for each year of operations would be as useful as it is impractical. Notwithstanding that a rate case is the gold standard, it is not the only tool that leads to appropriate regulation. The Commission relies upon its experience and resources to ensure a reasonable balance is achieved between the use of trackers and rate cases to recover costs.

Complex Holding Company Structures

The Energy Policy Act of 2005 (EPAct 2005) repealed the Public Utility Holding Company Act of 1935 eliminating restrictions on the types of companies that can own utilities, relaxing limitations on diversification and creating the Public Utility Holding Company Act of 2005 (PUHCA 2005). EPAct 2005 also removed the authority to regulate corporate structures and transactions among affiliated entities from the Securities and Exchange Commission and placed it with the FERC, which is also now required to ensure that a proposed merger involving utilities will not result in harmful cross-

subsidization. The FERC became the sole federal entity with authority to decide how costs for affiliate transactions should be allocated for all utility holding companies.

These changes in federal oversight of the electric utility industry are causing more changes within the industry. Among the industry changes are:

1. Ever-larger utility holding companies with increasingly complex corporate structures;
2. Private equity funds purchasing traditional utility companies; and
3. The increasing involvement of hedge funds and other Wall Street-type firms in wholesale power markets.

The result is an industry in which the wholesale power markets are far more complex than just a few years ago and the use of sophisticated financial instruments to hedge or speculate in power markets has grown rapidly.

Like all state commissions, this Commission's ability to regulate utility holding companies is dependent on its jurisdictional authority, resources and expertise. However, the Commission's ability to continue rendering satisfactory regulation will not only depend on the evolving industry structure and environment but also on the outcomes of actions being taken at the federal level – primarily by the FERC. Given the recent changes in federal oversight of the industry and the corresponding changes in industry structure, it is unclear how well the existing federal model for oversight will work.¹⁴

¹⁴ A recent report by the U.S. Government Accountability Office (GAO) provides little reason to think the FERC is performing its obligations in a satisfactory manner. See United States Government Accountability *(footnote continued)*

III. INFRASTRUCTURE INVESTMENTS

Expected environmental regulations and growing customer needs will necessitate a significant level of infrastructure investment that will result in retail rate increases.

Expected environmental regulations and customer needs will necessitate a significant level of infrastructure investment, resulting in retail rate increases. Because significant construction projects such as environmental compliance, base load generation and associated transmission are capital intensive and without regulatory assurance of cost recovery, it is difficult to secure financing of these projects.

Generation

Historically there have been five cycles of power plant construction:

- Base load units of ever increasing size were built from 1950 through 1989 to meet Indiana's growing economy. Base load units typically utilize coal or nuclear fuel and operate 70 to 90% of the time.
- Peaking units (three cycles) 1967 to 1973, 1979 to 1981 and 1991 to 1995 – As air conditioning and heat pumps became more prevalent in the late 1960s through the mid 1990s, peaking units operating around 10% of the time were built. Peaking units, which are cheaper to build than base load units and only operate around 10% of the time, are typically fueled by natural gas.
- Merchant plants 2000 to 2003 – In response to rising energy prices and the potential for retail competition, a total of 4,067 megawatts (MW) (summer rating) of generation was constructed by independent power producers (merchant plants) in 2000 to 2003 in Indiana. Originally built to sell power in the wholesale markets, many of these plants have subsequently been purchased by regulated Indiana utilities, often at prices significantly below net book value. Currently, 725 MW (18%) remain as merchant units and 3,342 MW (82%) are in utility generation portfolios, of which 1,766 MW are in Indiana utility portfolios.

Office, "Utility Oversight – Recent Changes in Law Call for Improved Vigilance by FERC," February
(footnote continued)

Electric System Reliability

Two measures of electric system reliability (also referred to as resource adequacy) are reserve margins and the age profile of the generating fleet. Reserve margins are the amount of extra capacity available to serve load growth and to respond in the case of a system contingency, such as the unanticipated breakdown of a generation plant or large transmission line.

Indiana Reserve Margins

The last base load unit in Indiana was completed in 1989, and it appears a new cycle of peaking and base load generation construction will be needed.

The last base load unit in Indiana was completed in 1989 and it appears a new cycle of peaking and base load generation construction will be needed. To maintain 12% reserve margins, new generation is required nationally by 2015 and regionally by 2012.¹⁵ To date, Indiana utilities have generally utilized wholesale purchases from other sources, rather than building capacity, to maintain reserve margins. It takes roughly three to five years to construct new gas-fired peaking generation, five to ten years to construct new coal-fired base load generation and still longer to bring new nuclear generation online.

Table 4 shows the age profile for the fleet of electric generation owned by Indiana utilities (the columns in the table are cumulative). As illustrated in Table 4, 61% of the coal-based fleet is more than 30 years old and 26% of that fleet is more than 40 years old. Natural gas-fired generation is much newer, with only 19% of that fleet more than 10 years old. Gas, however, is three to four times more expensive to operate than coal. As a result, gas units typically operate primarily in periods of high peak demand.

2008, GAO-08-289.

Table 4

Age Profile of Generating Units Owned by Indiana Utilities

Years Old and Older	Number of Coal Based Units	MW of Generation (Summer Rating)	Percent of Total Coal Based Generation	Number of Peaking (Gas, Oil) Units	MW of Generation (Summer Rating)	Percent of Total Peaking Generation
50	25	1,974	11.5%	10	241	3.9%
40	44	4,475	26.1%	16	356	5.8%
30	60	10,381	60.6%	25	625	10.2%
20	71	15,807	92.3%	28	845	13.8%
10	75	17,133	100.0%	37	1,181	19.3%
1	75	17,133	100.0%	60	6,115	100.0%

Future Generation for Indiana Demand

The 2007 SUFG Forecast shows a need for new generation of approximately 5,570 MW by 2015 for a 15% reserve margin.

The 2007 SUFG Forecast of Indiana electric generation shows net peak demand growing to 25,464 MW by 2015 and a need for new generation of approximately 5,570 MW by that time for a 15% reserve margin. Table 5 shows generation projects approved by or pending before the Commission.

¹⁵ The electric industry has historically maintained reserve margins in the 15 to 20% range. With the development of RTOs, reserve margins have fallen somewhat to reflect the benefit of better regional coordination. A 12% reserve margin was assumed for the sake of discussion in this report.

Table 5
Approved and Pending Indiana Generation Plants

Projects Approved by the Commission	MW	Completion Date
Vectren Wind PPA - Benton County, IN (30 MW)	6	2008*
Hoosier Energy Landfill Gas Projects	Up to 20	2008
I&M Wind PPA – Fowler Ridge, IN (100 MW)	20	2009*
NIPSCO Wind PPA – Buffalo Ridge, MN (50 MW)	10	2009*
NIPSCO Wind PPA – Barton, IA (50 MW)	10	2009*
NIPSCO – Sugar Creek CCGT Purchase	535	2010
Duke Energy Indiana Edwardsport IGCC (net of unit 6-8 ret.)	460	2013
IMPA Thoroughbred in KY	100	2013
TOTAL APPROVED	1,161	
Projects Pending Before the Commission	MW	Completion Date
Hoosier Energy – WVPA Holland CCGT Purchase	627	2009
Indiana Gasification LLC	134	2013
IPL – Hoosier Wind Farm, IN (100 MW)	20	2009*
TOTAL PENDING	781	
TOTAL APPROVED AND PENDING	1,942	
Shortfall Amount in 2015 assuming 12% Reserve margin	2,863	

* 20% of the various wind PPA outputs MW are assumed to be available at time of summer peak

If Commission approval is granted for the Holland CCGT purchase, the Indiana Gasification LLC project and the IPL Hoosier Wind Farm, up to 1,407 megawatts would be represented by all of the projects that are not included in the SUFG projection. This would still leave a shortfall of 3,628 MW in 2015 based on the SUFG projection and a 15% reserve margin. For a 12% reserve margin, the shortfall would be 2,863 MW.

In an order issued November 20, 2007, the Commission approved Duke Energy Indiana’s construction of the Edwardsport Integrated Gasification Combined Cycle (IGCC) generating facility. The Edwardsport IGCC will have a capacity of 630 megawatts and will be designed to use Indiana bituminous coal. The IGCC facility will utilize a gasification process to convert bituminous coal into a combustible gas called

synthesis gas or “syngas” that is then used to generate electricity. The IGCC facility is a cleaner technology that reduces traditional air emissions by approximately 50% compared to a state-of-the-art pulverized coal plant and also provides 90% or higher mercury capture at a fraction of the cost of a pulverized coal unit. Construction of the IGCC facility should be completed in 2013.

Compared to other similar proposed projects, Indiana is leading the development and implementation of coal gasification technology. The Edwardsport IGCC facility will be the first commercial-scale plant of its kind built in the U.S. in the last 10 years. In addition, Duke expects to receive approximately \$316.5 million in state and federal tax incentives, and there is a possibility for additional funding from the DOE due to its restructuring of the FutureGen project.

The Midwest ISO reported to the Commission in June that electricity from wind comprises a larger share of generation in its footprint with a 96% increase in nameplate capacity from 2007. Indiana currently has 130 MW of wind generation online with approximately 3,150 MW in the Midwest ISO interconnection queue through December 2009. It should be noted that the intermittent nature of wind power does not provide a guarantee of wind capacity being available at the time of peak electricity demand. Midwest ISO data shows that wind capacity in its region was available on peak 11.8% of the time in 2005, 66.5% in 2006, and only 1.6% in 2007. However, as more wind power is installed across the Midwest ISO footprint, the availability at peak for wind should level out and become more predictable. The Midwest ISO is creating a sophisticated wind prediction tool in order to allow it to better predict how much wind power will be supplied into the market.

**On a relative basis, Indiana has more coal and less natural gas, oil,
nuclear and hydro generation than the region or the nation.**

With respect to Indiana’s portfolio of generation fuel, the Annual Energy Outlook 2008 by the EIA gives a forecast of national electric generation needs in the year 2015 and a projected fuel mix. The Reliability First Corporation (RFC) Long Term Resource

Assessment 2007-2016 for the region, including Indiana, provides the regional fuel mix forecast for 2015. These two fuel mix forecasts are compared to the projected Indiana fuel mix in Table 6 below. On a relative basis, Indiana has more coal and less natural gas, oil, nuclear, and hydro generation than the region or the nation.

Table 6
Comparison of Generation Fuel Mix Forecasts

	Indiana 2007	SUFG Indiana 2015	Regional RFC 2015	National EIA 2015
Coal	69.2%	63.3%	46.9%	33.9%
Natural Gas	20.6%	27.6%	28.4%	30.5%
Oil	1.4%	1.1%	5.8%	9.9%
Renewable	0.0%	1.4%	1.5%	0.1%
Pumped Storage	0.0%	0.0%	1.8%	2.3%
Nuclear	8.5%	6.5%	14.6%	10.9%
Hydro	0.3%	0.2%	0.9%	12.4%
	100.0%	100.0%	100.0%	100.0%

NOTE: Percentages shown are percent of installed capacity (MW)

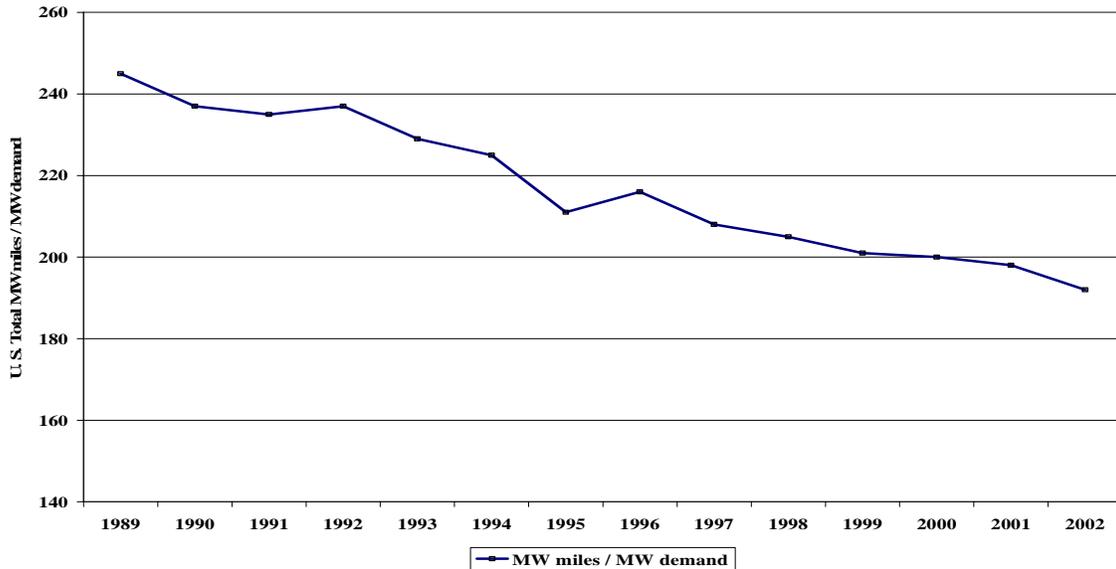
Transmission

Electric Transmission in the United States and Indiana

Transmission investment in the United States declined 22% from 1989 to 2002.

Nationally transmission investment has been lagging in recent years. Table 7 shows that the U.S. total MW miles / MW demand declined from 245 in 1989 to 192 in 2002, a decline of 22%. The transition to competitive wholesale markets in the electric utility industry during this time period created new complexities in the process of planning, siting and constructing new transmission facilities; thus slowing new construction. The last significant transmission built in Indiana was constructed in the 1980s.

Table 7
U. S. Total MW miles / MW demand



Source: U. S. Transmission Capacity: Present Status and Future Prospects, EEI and US DOE, August 2004

Congressional concern regarding the lack of transmission investment is reflected in the EPAct 2005 where it requires the FERC to develop incentives to spur transmission investment. In July 2006, the FERC issued rules designed to bolster investment in the nation’s aging transmission infrastructure. In addition to new financial incentives, these rules provide increased regulatory and procedural certainty to encourage transmission investment.

Status of Regional Transmission Organization Planning Processes

Regional Transmission Organizations (RTOs) conduct long-term regional transmission planning to identify system upgrade and expansion needs for reliability and economic benefit. They examine the needs across all utilities and loads within their regions, and explore opportunities for interregional benefit. Both the Midwest ISO and PJM have recently identified and authorized many transmission upgrades and additions within their respective regions.

The Midwest ISO has approved a significant expansion targeted at transmission problems experienced in the SIGECO system located in southern Indiana. The SIGECO

system is surrounded by 345 kV transmission lines to the north on the Duke Energy Indiana system and to the south on non-Midwest ISO systems. These transmission lines and associated generation facilities located in the area contribute to periods of heavy loading on the SIGECO system, resulting in an inability to import power during periods of generation deficiencies within the SIGECO system. The current Midwest ISO transmission plan includes two new 345 kV lines, one to the west and another to the east of the SIGECO system.

Duke Energy and AEP have formed a joint venture called Pioneer Transmission LLC, to build and operate a 240-mile, high-voltage 765 kV transmission line from the Rockport generating station in southwestern Indiana to Greentown, east of Kokomo. The preliminary estimated cost of the line and associated facilities is \$1 billion. The project will be submitted in the PJM and Midwest ISO transmission expansion plans later this year. The in-service date for the project will be determined by these plans, with the earliest possible completion in 2014 or 2015. The companies stated that an extensive public outreach effort will be conducted in 2009 and 2010 before the final path of the line is selected.

Rate Impacts of Transmission Investment

Transmission facilities and related maintenance expenditures make up five to ten percent of the average residential customer's bill.

Transmission facilities and related maintenance expenditures make up five to ten percent of the average residential customer's bill. Increased investment in transmission will increase rates, but any increase is likely to be small given the relatively small share of the transmission component of bills. The exact increase experienced by customers will vary depending on the specific circumstances of their utility, including such factors as the timing of rate cases, the magnitude of specific investments, and the utility's share of costs allocated to them from new transmission projects in the Midwest ISO or PJM.

Distribution

Indiana's distribution infrastructure is aging. In recent and current rate cases, utilities have indicated a need for additional revenue to replace, rebuild and upgrade the existing distribution systems in the state. The proliferation of computers and other sophisticated electronic devices sensitive to voltage drops puts added pressure on the reliability of the distribution system.

Rate Impacts of Distribution Investment

As with transmission investment, increased investment in distribution will increase the average customer's bill. The exact increase experienced by customers will vary depending on the specific circumstances of their utility, including such factors as the timing of rate cases and the magnitude of specific investments.

IV. FEDERAL ISSUES

Regional Transmission Organizations

In landmark orders in 1996 and 1999, the FERC laid the groundwork for advancing open access transmission and forming RTOs, also referred to as Independent System Operators (ISOs). An RTO is an independent entity that oversees electric reliability throughout a geographic region, and is responsible for coordinating the electric transmission system in that region. The dispatch of generation is the principal means by which the RTO coordinates the transmission system and keeps the system within its physical limits for safe and reliable operation.¹⁶

Based upon bids submitted by generation-owning utilities and independent power producers,¹⁷ the RTO centrally dispatches generation resources throughout the regional transmission system to meet the demand for electricity at the lowest possible production

¹⁶ RTOs schedule and dispatch generation in their region using a methodology based on the prices and operating characteristics offered by generation owners. This methodology is intended to result in the most economical use of resources for the entire region.

¹⁷ An Independent Power Producer is a generation company that is not part of a regulated vertically-integrated utility company that may sell output under long-term contracts or directly into energy markets.

cost. Compared to the dispatch by individual utilities, the RTO takes advantage of a larger area with greater load diversity and a larger portfolio of supply resources to dispatch the lowest cost generation resources offered into the market.

When a utility joins an RTO, it transfers only operational control (not ownership) of its transmission system to the RTO. All of Indiana's transmission-owning electric utilities participate in RTOs and belong either to the Midwest ISO or the PJM.¹⁸ Members of the Midwest ISO are: Duke Energy Indiana, IPL, SIGECO, Hoosier Energy and NIPSCO. I&M is a member of the PJM. IMPA and WVPA are members of both.

Potential RTO Benefits

- Daily coordinated commitment of generation – centralized coordinated commitment of generation across the region produces savings by reducing the quantity of generation online, ensuring that the most economic generation is operating across the region;
- Reduced energy costs – costs are reduced by producing energy from the most economic generation resources across the region, employing the lowest cost options to manage transmission system limits, more fully and efficiently utilizing transmission capability in the region;
- Enhanced reliability – market-based dispatch of generation resources provides more responsive and accurate control of power flows on the transmission system, thus improving system reliability. Also, the RTO is able to view a much wider geographic area of the transmission system, allowing it to identify problems sooner and to initiate solutions more quickly than if each utility were operating its own system;
- Accurate price signals – the prices produced by the energy market provide information to help guide short and long-term decisions by market participants and regulators;

¹⁸ The Midwest ISO was formed by transmission owners in 1996, and is based in Carmel, Indiana. The Midwest ISO has over 700 employees and two control centers – one at the Carmel headquarters facility and the other in St. Paul, Minnesota. PJM is headquartered in Valley Forge, Pennsylvania.

- Market monitoring – by an independent entity safeguards the integrity of the markets against manipulation and abuse;
- Long-Term transmission planning – regional planning provides for meeting customers’ power needs on a more efficient basis; and
- Demand response – greater opportunities are offered for non-utilities (such as large industrial customers) to participate in RTO markets.

Challenges Faced by RTOs and State Regulators

- Quantification of RTO benefits and capturing these benefits for retail customers – many of the benefits of competitive electricity markets are qualitative and thus difficult to quantify;
- Concerns about transmission and generation investment – RTO market designs need to be sufficient to encourage transmission and generation investment. There are costs associated with regional transmission facilities, and they may be controversial with regard to location and payment of the facilities;
- Implementation of long-term regional transmission planning processes – individual stakeholders may not immediately recognize the benefits of a regional planning process and may be reluctant to fully engage in the process;
- Inclusion of demand response resources – communication of price information is required for demand response programs. Retail customers generally are not aware of cost variations due to peak demand and supply shortages, and therefore continue normal consumption patterns even when power supplies are tight and wholesale prices are high;
- Development of renewable resources – allowing renewable resource generation to sell power into a transparent wholesale market will further development of such resources; and
- Continued development and cost-effective improvement of RTO markets – wholesale power markets will continue to evolve and RTOs must make cost-effective improvements to adapt to that evolution.

Ongoing Development of RTOs

As noted earlier, Indiana utilities are members of either the Midwest ISO or the PJM RTO, or both. These RTOs continue to search for new and better ways to capture the potential benefits of a regional transmission organization.

Midwest ISO

In order to assure resource adequacy in the future, the Midwest ISO is implementing a two-phase plan. Phase one is the implementation of Ancillary Services Markets (ASM), scheduled to begin September 9, 2008.

Ancillary services are services necessary to support the transmission system capacity and the transmission of electricity from the generating resources to loads, while maintaining reliable operation of the transmission system. Development of the ASM will enable the Midwest ISO to minimize the total cost of providing electricity while maintaining transmission system reliability. The Midwest ISO ASM will provide regulating, spinning and supplemental reserves as ancillary services.

Phase two is the establishment of a reserve planning margin for all load serving entities in the Midwest ISO region, commonly referred to as “Module E”, which was conditionally approved by the FERC on March 28, 2008. The planning reserve margin for each utility will be based on a “loss of load expectation” (LOLE) engineering study. The goal of Module E is to encourage the development of new resources – both generation and demand response – by requiring utilities to hold sufficient resources to meet their current loads plus a reserve margin.¹⁹

Finally, the Midwest ISO is focusing on core values of reliability, efficiency and development in an attempt to quantify the benefits the organization brings to the electricity industry and Midwest region.²⁰ As of February 2008, the Midwest ISO estimated between \$555 million and \$850 million in annual net benefits are realized annually, resulting from its efforts, through improved reliability, dispatch of energy,

¹⁹ A Reserve Margin is the generation capacity that is available to the system operator if needed, but that is not currently generating electricity.

²⁰ The Midwest ISO calls this effort the *Midwest ISO Value Proposition*.

dispatch of reserves, contingency reserves and generation investments deferred. Stakeholders of the Midwest ISO, including this Commission, continue to push the organization to identify and capitalize on improvements and efficiencies it can bring to the electricity industry.

PJM Interconnection

PJM established a market for regulation reserves June 1, 2000 and a market for spinning reserves December 1, 2002. PJM has also initiated efforts to assure future resources adequacy by establishing the Reliability Pricing Model (RPM) Capacity Market that became effective June 1, 2007. Under RPM, periodic auctions are held for the delivery of capacity three years in the future. The auction results send price signals that attract capacity resources to the PJM region. PJM reported that a recent auction for delivery of capacity in the planning year of June 2010 through May 2011 resulted in an addition of 1,500 megawatts of capacity resources. The PJM commissioned an independent assessment of the RPM auction results by an outside consultant.

Although the Midwest ISO and the PJM RTO have taken different approaches to assure future resource adequacy, the FERC has approved both models. The Commission will continue to monitor the effectiveness of each model in assuring resource adequacy.

Effects of Wholesale Competition on Indiana Retail Ratepayers

The wholesale price of electricity, which the Commission does not regulate, has a direct impact on the fuel adjustment charge (FAC) portion of retail customers' electric bills. The costs and revenues resulting from purchases and sales by the utility in the wholesale market flow through the FAC. In addition, participating utilities are charged the costs of establishing and administering the RTO markets. In general, the Commission has authorized regulated utilities to recover these RTO administrative costs through a tracker or to defer these costs for subsequent recovery in a rate case. For 2007, RTO administrative costs for the five investor-owned Indiana utilities totaled approximately \$31,600,000.

Energy Policy Act of 2005

The Energy Policy Act of 2005 (EPAct05) mandated state commission consideration of five standards: (1) Net Metering, (2) Smart Metering, (3) Interconnection, (4) Fuel Diversity, and (5) Fossil Fuel Efficiency. The Commission has completed consideration of three of the five standards with the promulgation of the Net Metering Rule and Interconnection Rule and a final order in Cause No. 43083. Table 8 below shows the number of net metering customers in Indiana at the end of 2007.

Table 8
Indiana IOU 2007 Net Metering Summary

Utility	Total Number of Net Metering Customers and Facilities	Number, Size and Type of Net Metering Facilities
Duke Energy Indiana	30	29 – solar ranging from 1.0 to 28.8 kW 1 – 9.0 kW wind
Indiana Michigan Power	1	1 – 1.1 kW solar
IPL	5	Total capacity of 6.86 kW solar
NIPSCO	4	1 – 2.5 kW solar 1 – 1.36 kW solar 1 – 640 W solar 1 – 10.0 kW wind
SIGECO	1	1 – 5.0 kW solar

The Commission considered in Cause No. 43083 whether it was appropriate for electric utilities in the state to provide and install meters and communication devices, commonly referred to as Smart Metering, to allow for customer participation in time-based pricing and other demand response programs. The Commission found that it was not appropriate to adopt this EPAct 2005 standard, due in large part to the lack of solid foundation of demand response programs in the state from which such action would constitute a logical and evolutionary step.

Finally, on July 19, 2007, the Commission initiated a proceeding to consider issues with Fuel Sources and Fossil Fuel Generation. With respect to Fuel Sources, each electric utility is required to develop a plan to minimize dependence on one fuel source and to ensure that the electric energy it sells to consumers is generated using a diverse range of fuels and technologies, including renewable technologies. In order to address Fossil Fuel Generation Efficiency, each electric utility is required to develop and implement a 10-year plan to increase the efficiency of its fossil fuel generation. The Commission plans to issue its decision by August 8, 2008.

Energy Independence & Security Act of 2007

The Energy Independence & Security Act of 2007 (EISA) is a sweeping, comprehensive energy law that focuses on improved fuel efficiency standards in the transportation sector; improved energy efficiency standards for lighting, appliances, heating and cooling systems and various motors; and research and development of energy technologies and infrastructure. Title V - Section 532 amends the Public Utility Regulatory Policies Act of 1978 (PURPA) and requires the Commission to consider whether electric utilities should integrate energy efficiency resources into utility, state and regional plans and to adopt policies establishing cost-effective energy efficiency as a priority resource. It also requires the Commission to consider modification of rate designs to align utility incentives with the delivery and promotion of energy efficiency resources. The Commission has until December 2010 to make a final determination on these standards.

Title XIII – Smart Grid establishes a Federal policy to support the modernization of the Nation’s electricity transmission and distribution system to maintain a reliable and secure electricity infrastructure that can meet demand growth and achieve the characteristics of a “Smart Grid”. Section 1307 of this Title requires the Commission to make a determination on whether an electric utility must demonstrate that it considered qualified smart grid facilities prior to undertaking investments in non-advanced grid technologies. It also requires the Commission to consider authorizing electric utilities to recover from ratepayers any costs relating to the deployment of a qualified smart grid

system and the remaining book-value costs of any equipment rendered obsolete by the deployment of smart grid technology. The Commission has until December 2009 to make a final determination on these requirements.

V. APPENDICES

Appendix A – Electric Utility Revenues

Electric Utility Revenues Year ending December 31, 2007

Rank	Utility Name	Operating Revenues	% of Total Revenue
1	Duke Energy Indiana, Inc.	\$2,229,308,648	29.11%
2	Indiana Michigan Power Co.	2,006,310,907	26.19%
3	Northern Indiana Public Service Co.	1,359,522,750	17.75%
4	Indianapolis Power & Light Co.	1,051,865,453	13.73%
5	So. Indiana Gas & Electric Co. d/b/a Vectren	488,000,653	6.37%
6	Northeastern REMC	86,393,689	1.13%
7	Richmond Municipal	86,190,890	1.13%
8	Anderson Municipal	55,320,286	0.72%
9	Mishawaka Municipal	47,485,260	0.62%
10	Harrison County REMC	42,230,685	0.55%
11	Jackson County REMC	40,647,064	0.53%
12	Crawfordsville Municipal	29,409,283	0.38%
13	Logansport Municipal	29,250,675	0.38%
14	Auburn Municipal	22,650,153	0.30%
15	Frankfort Municipal	21,651,623	0.28%
16	Peru Municipal	18,046,940	0.24%
17	Lebanon Municipal	14,957,754	0.20%
18	Marshall County REMC	11,081,978	0.14%
19	Lawrenceburg Municipal		0.00%
20	Tipton Municipal	8,392,681	0.11%
21	Columbia City Municipal	8,051,598	0.11%
22	Knightstown Municipal	1,977,757	0.03%
23	Troy Municipal		0.00%
24	Kingsford Heights Municipal	579,489	0.01%
25	Straughn Municipal	136,665	0.00%
	Total	\$7,659,462,881	100.00%

Source: Data taken from 2007 Annual Reports filed with the Commission. Lawrenceburg and Troy have not reported yet.

Appendix B – Residential Electric Bill Comparison

Electric Utility Residential Customer Bills (as of July 1, 2008 Billing) Overall Ranking for 1,000 kWh of Consumption

Rank	Utility Name	5-Year Average	2008 Bills	2007 Bills	2006 Bills	2005 Bills	2004 Bills
1	Marshall County REMC	\$110.99	\$118.63	\$115.26	\$115.49	\$103.90	\$101.65
2	Northern Indiana Public Service Co.	\$101.28	\$105.37	\$105.61	\$106.35	\$97.54	\$91.55
3	So. Indiana Gas & Electric Co.	\$98.70	\$119.04	\$103.02	\$95.25	\$88.67	\$87.54
4	Northeastern REMC	\$92.22	\$99.34	\$96.18	\$96.52	\$85.51	\$83.56
5	Harrison County REMC	\$88.05	\$97.85	\$95.16	\$87.25	\$80.86	\$79.11
6	Duke Energy Indiana	\$87.06	\$96.62	\$90.20	\$89.73	\$79.53	\$79.20
7	Kingsford Heights Municipal	\$81.76	\$80.08	\$80.42	\$85.42	\$82.68	\$80.21
9	Troy Municipal	\$80.94	\$103.84	\$103.02	\$72.40	\$62.21	\$63.25
8	Jackson County REMC	\$80.73	\$87.57	\$88.54	\$79.93	\$75.73	\$71.90
10	Anderson Municipal	\$76.39	\$84.41	\$78.89	\$77.00	\$74.08	\$67.57
13	Richmond Municipal	\$75.25	\$78.65	\$80.17	\$81.45	\$72.33	\$63.64
14	Columbia City Municipal	\$75.06	\$84.25	\$76.07	\$78.08	\$71.86	\$65.04
19	Logansport Municipal	\$74.83	\$91.34	\$74.69	\$68.51	\$70.44	\$69.19
12	Crawfordsville Municipal	\$74.51	\$81.85	\$76.16	\$75.75	\$73.20	\$65.58
11	Indianapolis Power & Light Co.	\$73.85	\$74.72	\$76.20	\$78.91	\$70.50	\$68.92
18	Tipton Municipal	\$73.22	\$81.32	\$76.73	\$75.48	\$72.38	\$60.19
16	Peru Municipal	\$72.49	\$82.08	\$88.44	\$68.34	\$67.15	\$56.44
20	Lebanon Municipal	\$71.88	\$79.39	\$74.41	\$72.76	\$69.82	\$63.02
17	Straughn Municipal	\$71.06	\$77.17	\$70.98	\$69.47	\$73.10	\$64.57
15	Indiana Michigan Power	\$70.43	\$73.66	\$71.96	\$69.26	\$68.93	\$68.34
21	Frankfort Municipal	\$69.31	\$76.60	\$71.69	\$70.84	\$67.05	\$60.37
3	Knightstown Municipal	\$68.56	\$82.12	\$76.15	\$66.22	\$60.24	\$58.08
22	Mishawaka Municipal	\$66.82	\$63.53	\$82.14	\$63.40	\$58.70	\$66.35
24	Lawrenceburg Municipal	\$66.09	\$70.02	\$68.42	\$67.83	\$66.81	\$57.39
25	Auburn Municipal	\$46.30	\$48.50	\$47.16	\$46.38	\$46.54	\$42.91



Communications

2008 COMMUNICATIONS REPORT

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I. COMMUNICATIONS OVERVIEW

Industry Structure

The communications environment has continued to evolve at a fast pace around the nation and in Indiana. In 2007, the Indiana Utility Regulatory Commission (IURC) worked diligently to implement the changes mandated in HEA 1279¹. The statute contemplates innovation and technological growth in an increasingly competitive environment. The IURC continues to work with the companies, other interested parties and the Office of Utility Consumer Counselor (OUCC) to balance of the interests of industry and consumers.

The IURC monitors the status of the telecommunications and video industries in order to provide information to the General Assembly regarding progress in obtaining and maintaining competition in telephone and video markets and achieving ubiquitous broadband deployment throughout Indiana. Telephone companies continue to implement changes to their service offerings and charges. Existing video service providers continue to convert their local franchises to state-issued franchises as they expire. In addition, the Commission issued franchises to several new video service providers in 2007. The level of competition and growth in the telecommunications and video markets in Indiana is moving toward the goals outlined in policy statements contained in HEA 1279.

We cannot overstate the importance of broadband deployment and the impact of such deployment on economic development and the environment.

The deployment of broadband service throughout the state will play a vital role in Indiana's future economic success. Access to broadband is important for all industries, including other utility industries. It is also the cornerstone of economic development. Many companies have made decisions to locate facilities in Indiana or to maintain or expand existing facilities in the state based on the availability of adequate broadband access. We cannot overstate the importance of broadband deployment and the impact of such deployment on economic and environmental issues in Indiana.

¹ HEA 1279 was passed by the Indiana General Assembly on March 14, 2006.

II. STATE ISSUES AND ACHIEVEMENTS

Video

Video Franchises in Indiana

Eight additional video franchises were issued in 2007.

As of December 31, 2007, according to IURC and Federal Communications Commission (FCC) data, there were 40 video service providers (VSPs) providing service in Indiana. Of the 40 VSPs, 18 received state-issued video franchises while the other 22 continue to provide service under local franchises. Eight of the 18 state-issued franchises were issued in 2007. Four of those eight companies are new providers; however, as of the writing of this report, three of those new providers were not yet providing service. The Commission issued the other four state franchises to existing cable providers that chose to terminate their existing local franchise agreements (Table 1).

Table 1**State-Issued Certificates of Franchise Authority
As of 12/31/07**

Company Name	Date Granted	New or Existing Provider	Date in-service for new providers
AT&T Indiana	8/30/2006	New	12/28/06
Daviess-Martin County Rural Telephone Corporation	9/13/06	New	10/1/07
Avenue Broadband Communications (f/k/a Charter)	11/30/06	Existing	
Time Warner Cable	12/06/06	Existing	
Comcast	11/30/06	Existing	
FirstMile Technologies	12/20/06	Existing	
Insight Communications Midwest, LLC	12/06/06	Existing	
LIG TV	11/30/06	New in requested service area	12/1/06
PSC	12/13/06	New in requested service area	12/1/07
Verizon North Inc.	12/20/06	New	7/17/07
Adams Wells TV	2/07/07	New	Not yet providing service
Bright House Networks, LLC	2/28/07	Existing	
Sigecom, LLC	1/24/07	Existing	
Endeavor Communications	3/14/07	New	3/14/07
WOW! Internet, Cable and Phone	3/22/07	Existing	
Acme Communications	6/06/07	New	Not yet providing service
Citizen's Telephone Corporation	7/25/07	Existing	
New Paris Telephone Co.	10/30/07	New	Not yet providing service

All 92 counties in Indiana have at least one video provider, as defined in I.C. 8-1-34(14), that provides service in at least a portion of the county, but only seven counties have county-wide video coverage.

All 92 counties in Indiana have at least one video provider that provides service in at least a portion of the county, but only seven counties have county-wide video coverage.² Because I.C. 8-1-34(14) defines video service as “the transmission to subscribers of video programming and other programming service through facilities located at least in part in a public right-of-way”, competitive alternatives that do not meet that definition – including satellite – are not considered in this discussion. According to the best information available to the Commission as of December 31, 2007, video service (as defined in the statute) was available in about 95% of the zip codes in the state, and six carriers began offering service in 23 zip codes that did not already have video service prior to the passage of HEA 1279.

Table 2 indicates the number of VSPs offering service in the 92 counties. However, this does not mean that there is full head-to-head competition in the counties where there are multiple providers because the VSPs may have separate service territories within the county. See Appendix 4 for a list of providers by county.

Table 2

Indiana Counties and Number of Active Video Providers

28 counties	1 VSP
19 counties	2 VSPs
35 counties	3 VSPs
5 counties	4 VSPs
4 counties	5 VSPs
1 county	6 VSPs

Source: FCC Database and IURC staff research

² Jay, Henry, Howard, Lake, Marion, Porter and Vermillion Counties are the only counties in Indiana with county-wide video service coverage.

Competition in Indiana's Video Market and its Effect on Pricing and Availability

Prior to the passage of HEA 1279, Indiana had only limited direct competition in the video service market as defined by I.C. 8-1-34(14). Before HEA 1279, cable companies that possessed locally-issued franchises provided video service. Local franchise authorities (LFAs) typically issued only one franchise in a particular geographic area. As a result, customers in those areas had only a single choice of video provider.

**HEA 1279 provided the means for increased competition;
now new competitors are emerging in Indiana.**

The Commission issued numerous state video franchises from July 1, 2006 through December 31, 2007 including 32 franchises to 18 different companies, many of which were existing cable companies operating in the state. HEA 1279 provided the means for increased competition, and new competitors are emerging in Indiana.

According to information that companies provided to the Commission, as of December 31, 2007, six new video providers were actively competing head-to-head for customers in Indiana. Further, these six new video competitors were active at year-end in 106 zip codes throughout the state. Compared to last year, when only two new providers were providing service in 5 zip codes, the rate of progress is accelerating.

There are many different packages and combinations of channels offered by VSPs. This variety of product offerings makes it difficult to accurately gauge the changes in pricing attributable to competition. Providers do not offer identical packages, and the makeup of those packages constantly changes. Nonetheless, the Commission is aware anecdotally of incumbent carriers reducing prices to retain customers after a new video service provider offers competing services. Also, there is some data that can provide general insight into the effect of competition on the pricing of video services.

According to the information provided to the Commission, there were some changes in the pricing of basic video services from 2006 to 2007 that seem to correlate with the presence of competition. In the 153 zip codes where there was a decrease in the average price of basic video service, 75% of those zip codes had multiple providers.

Technologies used to Provide Video Service in Indiana

The technologies used to provide video service across Indiana vary among providers. Some providers utilize co-axial cable, while others use state-of-the-art fiber optic cable. According to data gathered from the Commission's annual survey, the incumbent cable providers have upgraded their systems to hybrid fiber/coax. The new video providers, in contrast, are using either all fiber or a combination of fiber and copper to provide video service. AT&T's U-verse™ product is an example of Internet Protocol (IP) based technology. This service is similar to the Internet in that the consumer views a menu of the programs available and then downloads only the programs they want. In contrast, Verizon's more traditional technology provides a complete selection of programs to the home, enabling the consumer to make the selection at the TV set.

Local Unit Issues

The Commission must now consider issues and questions regarding the provisioning of PEG channels and the handling of customer complaints.

Since the Commission assumed its video franchising responsibilities in July of 2006, two issues have emerged that previously were addressed in local franchise agreements (LFAs) and handled by local franchise authorities. The Commission has been approached by community representatives regarding Public, Educational and Governmental (PEG) channels and the handling of customer service issues.

Public, Educational and Governmental (PEG) Channel Issues

PEG programming availability provides a community service by making video content of local origin and interest available to citizens. Some LFAs required traditional cable television providers to provide accommodations for PEG programming. Such provision for PEG programming typically included channel capacity on which to carry the PEG programming signal and in some instances, the availability of equipment and studios that could be used to produce PEG programming. Under HEA 1279, in units that required PEG channel capacity, all new VSPs with state-issued franchises must provide capacity for the same number of channels required by the legacy LFA. In areas with no PEG channel capacity requirements, HEA 1279 empowers the Commission to implement

the PEG channel requirements it deems appropriate. Communities that believe a particular video service provider is not meeting its PEG channel obligations have the option to file a complaint with the Commission.

The Commission has taken no formal action with regard to PEG issues. While the Commission received correspondence and met with representatives from local units regarding the continuation of PEG channels and the requirement for new VSPs to provide PEG channels, the Commission has not received any formal complaint petitions.

Enforcement of FCC Customer Service Standards

The Commission issued notification to current and future holders of state-issued franchises that it intends to enforce the FCC's customer service standards.

The oversight of Customer Service Standards is another area the Commission is addressing as the video franchise authority for the state of Indiana. Before the Commission became the sole video franchise authority, local cable boards provided a venue for customers to file complaints regarding their video service. For VSPs with state-issued franchises, the Commission now serves in that capacity. With the adoption of General Administrative Order 2007-2, the Commission issued notification to current and future holders of state-issued franchises that the Commission will enforce the FCC's existing customer service standards.

The reason for this action is to provide a single venue for providers to respond to consumers' video complaints. This is beneficial to consumers and providers alike because consumers will be calling the agency that can best assist them and providers can expect consistency when responding. From March 19, 2008 when the Commission's enforcement authority became effective through June 30, 2008, the IURC Consumer Affairs Division has taken 193 complaints from Indiana consumers regarding service issues covered in the FCC's standards. This represents 40% of the total video complaints and 10% of all complaints taken during that same period. However, it is important to point out that 135 of those video complaints were related to one company during a merger transition that involved the transfer of 300,000 customers.

Universal Telecommunications Service

Effects of Competition and Technological Change

The majority of companies showed a decrease in the percentage of their customers subscribing to Basic Telecommunications Services.

Basic Telecommunications Service (BTS) remains under the authority of the IURC until June 30, 2009. The Commission gathers, through its annual survey, information from each provider regarding the percent of subscribers to BTS. The weighted average percentage of ILEC customers that subscribe to BTS is approximately 10%. While some companies showed a slight increase from 2006 to 2007, the majority of companies reporting showed a decrease in the percentage of their customers subscribing to BTS. This likely indicates that as providers are offering packages of services at a cost savings over stand-alone offerings, customers are responding.

HEA 1279 provides for companies to increase the rate for BTS prior to July 1, 2009 with the caveat that broadband service will be offered to at least 50% of the households located in the local exchange area where the rate increase is effective. During the first six months of 2008, Embarq and Verizon each provided notice to the Commission that they would increase the rate for BTS by \$1.00 in portions of their local exchange service areas. Within 18 months of the effective dates of those rate increases, each company is required to provide proof that broadband is offered in at least 50% of the households in those exchanges. The IURC is working with the companies to ensure compliance with this statutory requirement.

Indiana Universal Service Fund (IUSF)

Without universal service support, residents of some areas of the state would pay significantly more for telephone services than those living in other areas.

Universal Service is a program designed to benefit consumers in all regions of the nation by providing access to comparable services at comparable rates. Historically, Indiana companies have contributed to and been recipients of the Federal Universal Service Fund. In October 2007, the Commission implemented a state universal service

fund for Indiana (IUSF). The purpose of the IUSF is to provide cost recovery so that companies in high cost areas³ may continue to offer services at rates that are “just, reasonable and affordable.” Without universal service support, residents in some areas of the state would pay significantly more for telephone services than those living in other areas. This could result in a reduction in telephone penetration in high cost areas. Telecommunications companies that serve these areas could also decide they cannot afford to modernize their networks or provide services of the same quality as is available in urban areas.

An IUSF surcharge of 0.54% of their intrastate retail charges began appearing on customers’ bills in October 2007. For example, if a customer’s intrastate telephone bill is \$20.00 for a particular month, the IUSF surcharge for that month would be \$0.11. Similar programs that provide support for telecommunications in areas that are not profitable to serve have existed in Indiana since the early 1990s. These prior programs were funded by long distance (or inter-exchange toll) revenue from a limited number of companies. Indirectly, consumers contributed to these funds through their long distance rates, although there was not an explicit charge on their bills. These indirect programs ceased with the implementation of the IUSF. Placing the surcharge on customers’ bills is required to make the fund transparent, visible to customers and competitively neutral across all telecommunications carriers.

In December 2007, the Commission selected a third-party administrator to manage the IUSF. The selected administrator, Solix, administers state universal funds for 14 states throughout the country. Solix serves Indiana by collecting funds from contributing carriers and disbursing the funds to small rural carriers that meet certain criteria and demonstrate a need for the support.⁴ The Commission receives status reports on the IUSF operations monthly and works very closely with Solix.

³ High cost service areas are designated by the federal government due to the high fixed costs of building and maintaining a telecom network in rural areas with low population densities or rugged terrain.

⁴ In order to qualify for support from the IUSF, companies must meet certain standards, maintain service quality and demonstrate need as enumerated in the Final Order in Cause No. 42144. In this Cause, the Commission approved a settlement agreement between small rural carriers, large ILECs, wireless carriers and competitive local exchange carriers.

The Indiana General Assembly recognized the need to specifically address telephone affordability and directed the IURC to establish the Lifeline Assistance Program.

The most recent Telephone Subscribership Report from the Federal Communications Commission ranked Indiana the lowest telephone penetration rate in the nation with 88.6% of households having a telephone compared to the national penetration rate of 94.9%.⁵

The Indiana General Assembly recognized the need to specifically address telephone affordability and directed the IURC to implement rules for the establishment of a state Lifeline Assistance Program no later than July 1, 2008 and for the program to be operational no later than July 1, 2009.⁶ The State Lifeline Program has the following objectives:

- The Lifeline program will be funded by a percentage surcharge that will appear on all Indiana telecommunications customers' bills, with the exception of Lifeline participants;
- The federal Lifeline program will contribute an additional 50% in matching funds to the state discount to low-income customers, up to a maximum of a \$1.75 per month per customer in federal support;
- Qualifying low-income households will have a discount on their phone bill between \$5.75 and \$9.75 depending upon the amount of their carrier's subscriber line charge;⁷ and
- The state program will expand upon the eligibility criteria of the federal program so that more low-income households will qualify for the discount.

⁵ *Telephone Subscribership in the United States*, Wireline Competition Bureau of The Federal Communications Commission, released March 2008

⁶ I.C. 8-1-36

⁷ Initially, the Indiana Lifeline Assistance Program will fund a \$1.00 discount for each eligible customer. Federal funds will match 50% of the state discount in addition to the discounts already provided by the federal Lifeline Link-Up program. This results in a reduction of participants' telephone bills by an average of \$9.00.

The Indiana Lifeline Assistance Program will increase federal Lifeline funds returned to Indiana and circulate more money into the Indiana economy.⁸ The increased assistance to low-income households will help low-income residents stay connected to the Public Switched Telephone Network which increases its value and usefulness for everyone. The IURC is on track to meet the legislative implementation directives.

Preparing Indiana for the Future

Area Code Relief

The IURC will likely need to implement area code relief measures in the near future.

Three-digit area codes and seven-digit telephone numbers are finite resources that are in heavy demand. The increase in telecommunications providers, the growth in wireless customers, and the use of fax machines and Internet-based phone systems all place pressure on numbering resources. When assignable telephone numbers exhaust in a particular area code, the IURC must implement area code relief consisting either of a geographic split of the area code into two or more areas or an overlay of a new area code in the same geographic area as the existing area code. Neither option is popular with citizens because they involve either changes of phone numbers or ten-digit dialing to place a local call.

It is likely that the IURC will need to implement area code relief measures in the near future. Forecasting reports from the North American Numbering Plan Administrator (NANPA) indicate that area code 812, in southern Indiana, has the shortest remaining life of the Indiana area codes, with a current exhaust projection of 2011. Area code relief planning typically begins approximately three years before projected exhaust; therefore, a petition for area code relief may be filed by NANPA in 2008. In an effort to delay exhaust, the Commission filed a petition with the FCC for authority to implement mandatory thousand-block number pooling in the 812 area code.⁹ If the FCC delegates the Commission the requested authority, the life of area code 812 may be extended. The IURC will continue to closely watch area code 812.

⁸ Indiana telecommunications customers contribute to the federal Lifeline Assistance program via the federal universal service charge that is assessed on retail interstate telecommunications services.

⁹ The petition also included area code 765 since it is due to exhaust within six and a half years.

The following table shows the current status of numbering resources for Indiana's six area codes:

Table 3

Area Code Life Projections	
Area Code	Year and Quarter of Projected Number Exhaust
812	2011 3Q
317	2013 4Q
765	2015 1Q
219	2029 4Q
260	2030 4Q
574	2034 2Q

Digital Television and Wireless Broadband

After February 17, 2009 all television transmissions will only be in digital format.

The last day for full-power television stations to broadcast in analog format is February 17, 2009. While many television broadcasters are already using digital signals, Congress mandated that after this date all television transmissions must be in digital format. Digital television provides a much higher quality picture than traditional analog television and allows over-the-air broadcasters to offer the type of pay-per-view programming currently available from cable and satellite television providers. Additionally, over-the-air digital television broadcasts use spectrum (airwave frequencies) more efficiently, thus freeing space to be used for other applications such as wireless broadband.

As part of the transition to digital television, the FCC required all television sets shipped through interstate commerce or imported into the United States to contain digital tuners by March 1, 2007. In order to display digital television broadcasting, existing analog televisions will require a converter box to translate the digital broadcast signal. While newly manufactured or imported sets must have a digital tuner, retailers may only

sell analog-only television sets from existing inventory if labeled with information indicating that such sets will require a converter box after February 17, 2009.¹⁰

The IURC provides a link on its Web site to connect consumers to the information they need to prepare for this upcoming change and plans further educational activities between now and February 2009 to assist in the transition.

III. INFRASTRUCTURE INVESTMENT

Indiana telephone companies have spent more than \$516 million to bring high-speed broadband and video services to consumers in Indiana.

During the past two years, telephone companies reported investments of more than \$516 million to bring high-speed broadband and video services to consumers in Indiana.¹¹ This includes \$250 million by AT&T, \$136 million by Verizon, \$112.6 million by small telecoms and \$18 million by Embarq. These types of investments are continuing in Indiana. One example is the recent announcement by Smithville Telephone Company of its plan to invest \$90 million to upgrade infrastructure in its rural Indiana exchanges (more details on page 18). This indicates significant movement toward increasing the quality of service customers receive and has the potential to expand competition in the marketplace.

Broadband and Economic Development

Broadband is a cornerstone of economic development in the 21st century and will play a vital role in Indiana's future economic success.

Economic development is defined as: "The process of raising the level of prosperity and material living in a society through increasing the productivity and efficiency of its economy."¹² Broadband is a cornerstone of economic development in the 21st century

¹⁰ "Digital Television: An Overview", p. 32, Congressional Research Service Report to Congress, updated January 11, 2008.

¹¹ An Interim Report on the Economic Impact of Telecommunications Reform in Indiana Digital Policy Institute at Ball State University, p. 61, February 15, 2008.

¹² Spero, Joan and Jeffrey Hart. "The Politics of International Economic Relations: Glossary." Indiana University, January 8, 2007, Indiana University, April 23, 2008 <http://www.indiana.edu/~ipe/glossary.html>.

and will play a vital role in Indiana's future economic success. To stay competitive in today's world, Indiana communities must have access to a quality high-speed broadband network. **A study in 2007 by the Brookings Institution and MIT estimated that a one-digit increase in the U.S. per capita broadband penetration equates to an additional 300,000 jobs nationally.**¹³ This study helps quantify the impact broadband penetration can have on the economic development of a region. While this study highlights the significance of broadband in adding new jobs, it is important to note that the data transfer rate of connections is also an important factor in the economic development of a region. Expanding availability should be a priority but should not overshadow the importance of having higher-speed connections.

Broadband and New Business

**In order for Indiana to continue to attract new business,
the role of broadband cannot be ignored.**

Without high speed connections, many businesses today would not be able to operate. This is a fact of the workplace and in order for Indiana to continue to attract new business, the role of broadband cannot be ignored. As the world becomes increasingly connected, those communities without adequate broadband to support businesses will be left behind. Communities such as Sunman and Scottsburg have experienced businesses threatening to leave towns where they are already established because of the lack of adequate broadband.¹⁴

Cross Light, a business in Sunman, Indiana, designs lighting systems for large buildings like auditoriums and exhibit halls. It has a substantial requirement for broadband services to download files and upload designs. Without adequate broadband availability, the owner was contemplating moving his business to another area. The local ILEC provided the necessary high-speed facilities to keep this business in Sunman.

¹³ An Interim Report on the Economic Impact of Telecommunications Reform In Indiana Digital Policy Institute at Ball State University, p. 22, February 15, 2008.

¹⁴ "Scottsburg, Indiana, USA: Award Winning Network Ensures Continued Survival of Small Town's Economy" 2006, www.alvarion.com/upload/contents/291/alv_cs_Scottsburg_LR.pdf.

One example of the businesses in Scottsburg that needed high-speed capability was the local Chrysler dealership. A corporate decision that all dealerships must have broadband caused the local dealer to consider moving to another area. Fortunately, Scottsburg was able to find a wireless provider that could provide an adequate broadband network which enabled that company and others to stay in Scottsburg. However, some communities may not be as fortunate. As technology continues to improve, the importance of broadband grows every day while companies decide in which communities they want to locate their business.

**Without the already available broadband infrastructure in the community,
the Medco investment most likely would have occurred elsewhere.**

The announcement of Medco Health Solutions, Inc. to locate the “world’s largest and most advanced automated pharmacy”¹⁵ in Whitestown is additional good news for Indiana and for Whitestown. The \$140 million development will bring an estimated 1,300 new jobs to the community by the year 2012. “It will certainly help widen the range of opportunities that we have available for our young people,” said Lt. Gov. Becky Skillman.¹⁶ Medco decided to locate in Whitestown because of the “feature rich site.” Broadband infrastructure played a vital role in securing this investment for the community. Without the already available broadband infrastructure in the community, this investment most likely would have occurred elsewhere. The Medco automated pharmacy is just one of many examples of how broadband can enable a community to compete for and ultimately win opportunities for economic development.

Another example of the importance of broadband infrastructure is the announcement of Honda Motor Company to construct a \$550 million automobile assembly plant in Decatur County, Indiana near Greensburg. The plant will begin mass production of fuel efficient 4-cylinder vehicles in fall 2008. It will have an annual production capacity of 200,000 vehicles and employ 2,000. Koichi Kondo, president of American Honda Motor

¹⁵ “Medco Chooses AllPoints at Anson in Whitestown, Indiana as Site for the Worlds Largest...” December 18, 2007, <http://www.reuters.com/article/pressRelease/idUS164459+18-Dec-2007+PRN2007>, May 12, 2008.

¹⁶ Brilliant, Jeremy. “Medco picks Boone County for ‘flagship’ automated pharmacy” Eyewitness News, December 18, 2007, <http://www.wthr.com/global/story.asp?s=7512200&ClientType=Printable>, May 13, 2008.

Co., said during the plant announcement, “We believe that the great state of Indiana has what we need to continue that success: an outstanding community of people, excellent transportation systems and the **necessary infrastructure to support industry.**”¹⁷

Indiana’s Rural Markets

In order to ensure that Indiana is at the forefront of economic development, rural communities must not be forgotten.

A lack of high speed connections is still too often a distinguishing factor between rural and urban communities. With statistics that demonstrate there are over 200 wireless providers now penetrating over 90% of zip codes in the state,¹⁸ it is important to remember that penetration of a zip code does not mean ubiquitous coverage for that zip code. In most cases, some consumers in “penetrated” zip codes are not able to receive service.

In order to ensure that Indiana continues to be at the forefront of economic development, rural communities must not be forgotten. Approximately 2.3 million Hoosiers live in rural areas, and in 50 of the state’s 92 counties, more than half the population lives in rural areas.¹⁹ Attracting new businesses, while maintaining those already in existence, is crucial for the economic development of Indiana’s rural communities and the state as a whole. Developing rural networks will help ensure that Indiana continues to keep and attract businesses that provide quality jobs and opportunities for rural Hoosiers.

A recent example of investment in rural broadband is the announcement made by Smithville Telephone Company of its plan to invest \$90 million over three years to bring state-of-the art high speed Fiber-to-the-Home technology to 29,000 customers in parts of 17 rural Indiana counties.²⁰ This investment was made possible in part by a federal

¹⁷ Honda to Build New Automobile Manufacturing Plant in Indiana, <http://www.indiana.honda.com/indiana.cfm>.

¹⁸ “Connecting Rural Indiana 2007: A Conversation About Broadband” by Susan Macey, Indiana Utility Consumer Counselor, p. 3.

¹⁹ Schnitzler, Peter “Hoosiers moving to the country, study finds” IJB Daily <http://www.indianaeconomicdigest.net/main.asp?SectionID=31&subsectionID=65&articleID=39916> March 10, 2008

²⁰ Smithville Press release, April 7, 2008.

program administered by the U.S. Department of Agriculture Rural Utilities Services Division that provides long-term loans for communications companies that upgrade services to rural areas. This investment will help develop the economies of these rural areas by providing the broadband capability needed to stay competitive in today's high speed global marketplace.

Institutions of Higher Education

These institutions utilize a variety of tools to train tomorrow's workforce, and one universal tool is broadband.

Indiana is fortunate to have an exceptional pool of nationally regarded institutions of higher education that help make Indiana a leader in developing highly skilled workers. These institutions utilize a variety of tools to train tomorrow's workforce, and one universal tool is broadband. Students accustomed to using high-speed broadband often seek jobs that require this important tool. Access to such a skilled workforce is also an attractive resource for companies that may be considering locating in Indiana. However, if the communities in Indiana do not have the broadband infrastructure necessary to support these types of jobs, the so called "Indiana Brain Drain" will continue. Indiana's best and brightest will be drawn to other areas of the country that have the infrastructure required to support their career paths.

Rural Health Care (Indiana Health Network)

On November 19, 2007, the FCC issued an order in which it "dedicated over \$417 million for the construction of 69 statewide or regional broadband telehealth networks in 42 states and three U.S. territories under the Rural Health Care Pilot Program (RHCPP)," in order to "significantly increase access to acute, primary and preventive health care in rural America." The "Indiana Health Network" was one of 69 projects chosen nationwide for this important program. The FCC indicates that "the network will connect approximately 100 health care facilities throughout Indiana, providing speeds of up to one Gbps at participating rural hospitals. The hospitals will serve as capacity hubs connecting to smaller health facilities." The maximum amount of financial support available to the Indiana Health Network is \$16,138,270.

Lieutenant Governor Becky Skillman issued a press release on January 18, 2008 announcing the award. In addition to all of the health-related benefits, Lt. Gov. Skillman noted that “the network will...reduce costs and travel time for consumers” by allowing the participating hospitals and health care facilities to connect to large, urban hospitals and gain access to the expertise and resources in those hospitals.

Broadband Environmental Efficiencies

Reduction of various emissions could be achieved through continued widespread deployment and use of broadband.

Once deployed, the adoption and usage of broadband can result in the reduction of CO² and other greenhouse gas emissions as well as other environmental efficiencies. However, it is important to point out that these results can only come to fruition with the widespread use of broadband services by consumers and businesses. According to an American Consumer Institute study,²¹ the adoption and use of the broadband-based applications listed below could have significant effects on the environment, if current trends continue over the next 10 years. The study outlines the emission reductions that could be achieved with continued widespread deployment and use of broadband.

- Teleconferencing could reduce greenhouse emissions by 199.8 million tons, if 10% of airline travel could be replaced by teleconferencing over the next 10 years.
- Telecommuting could reduce emissions by 588.2 million tons due to less driving, reduced office construction and energy saved by businesses whose employees are working from home. Teleconferencing and telecommuting can also increase productivity by reducing travel times and freeing up more time for people to use for work, personal business or leisure. The reduced fuel usage can also decrease the rate at which our consumption of imported oil increases, which may have a positive effect on our national “energy security”.

²¹ Broadband Services: Economic and Environmental Benefits, Joseph P. Fuhr Jr. and Stephen B. Posiask, October 31, 2007

- E-Commerce is predicted to reduce greenhouse gases by 206.3 million (U.S.) tons and could reduce the need for people to travel to exchange information in face-to-face meetings. It may also reduce the need for printing sales catalogs and brochures, thereby reducing paper.
- Reduction in production of plastics by downloading music and videos rather than purchasing discs, and office paper saved from using e-mails and electronic documents could lower emissions by 67.2 million tons. Reduced consumption of paper and plastic can also reduce the rate at which new landfills need to be built.

By using broadband facilities and equipment, power companies can monitor electric load.

Another study²² analyzed improvements in energy efficiency, which, in turn, can also reduce emissions. For example, by using broadband facilities and equipment, power companies can monitor electric load. The power companies can use the information gathered to turn on or off renewable energy sources to supplement traditional energy supplies. On the demand side, “Smart” homes and office buildings can send information back to the power company over wireless, fiber optic cables and broadband networks; the power company can then send signals back to the customers’ premises over the same cables and networks to turn off appliances that are not needed.

Broadband Deployment

Customer Needs: Broadband Deployment vs. Speed

Ubiquitous broadband deployment is an important policy goal, but consideration should also be given to the speed of broadband connections.

Discussions in recent years focused on where broadband connections are available. Increased consumer access to broadband services is an important measure of improvements in economic opportunity, but another important measure is whether the speed of the broadband service is sufficient to meet the needs of today’s consumers.

²² Towards a High-Bandwidth, Low-Carbon Future: Telecommunications-based Opportunities to Reduce Greenhouse Gas Emissions, Australian Climate Risk Pty Ltd. (Australia), 2007.

Policies that aim for ubiquitous broadband deployment are important, but consideration should also be given to the broadband speeds necessary to allow citizens to use the Internet's current and emerging applications. Historically, consumers used the Internet for exchanging e-mails and searching for content on Web sites. In 2000, when the FCC adopted its definition of a basic broadband connection as 200 kilobytes per second (200 kbps), in at least one direction, this speed was viewed as being fast "enough to change Web pages as fast as one can flip through the pages of a book."²³ Consumer expectations have evolved substantially beyond satisfaction with merely being able to change Web pages. The emerging applications of digital photo and video content sharing require much faster Internet access speeds. For example, the use of a broadband connection of 200 kbps to download a DVD-quality movie from the Internet would take approximately 16 hours.

**Last year, by one estimate, the video site YouTube consumed
as much bandwidth as the entire Internet did in 2000.**

Sending and receiving video images or digital photos requires enormous amounts of bandwidth. "Last year (2007), by one estimate, the video site YouTube consumed as much bandwidth as the entire Internet did in 2000."²⁴ In May 2007, the social networking site, Facebook, had 1.7 billion photos, with more than 60 million photos being added per week. The site was processing more than 3 billion photo requests every day with more than 100,000 images requested per second at peak times.²⁵ The continued increase in popularity of high-definition video that requires even higher speed furthers the case for a new faster speed definition of broadband.

²³ CC Docket No. 98-146, Second Report, para. 10, FCC 0-290 (Aug. 21, 2000). Available online at http://www.fcc.gov/Bureaus/Common_Carrier/Orders/2000/fcc00290.pdf.

²⁴ "Video Road Hogs Stir Fear of Internet Traffic Jam," Steve Lohr. The New York Times online edition, March 13, 2008. http://www.nytimes.com/2008/03/13/technology/13net.html?_r=3&ref=business&oref=slogin&oref=slogin&oref=slogin

²⁵ White Paper: *Challenge 2.0: Social Networking Drives New Requirements*, p.6, Prepared by Aditya Kishore, senior analyst, Heavy Reading (www.heavyreading.com) on behalf of Level3 Communications, Dec. 2007. <http://www.level3connects.com/down/Challenge-2.0-Social-Networking-Drives-New-Requirements.pdf>.

Traditionally, broadband connections were configured with faster download speeds and slower upload speeds because consumers typically downloaded more information than they uploaded. With more Internet consumers producing (through uploads) increased amounts of Internet-accessible content, the traditional asymmetrical broadband speeds (faster download/slower upload) are increasingly insufficient for modern consumers' needs. Accordingly, today's Internet users need access to fast upload speeds to the Internet as well as fast download speeds. If Internet speeds are not fast enough, bottlenecks can result that limit consumer's ability to enjoy the benefits of the modern Internet.

Wireless providers could become gap fillers in the pursuit of ubiquitous broadband availability.

Traditional broadband connections operate from a fixed location. However, the popularity of the Internet is paralleled by the popularity of mobile and portable wireless devices – including cell phones, Wi-Fi handsets, PDAs, smart phones, laptop computers, etc. While people are able to gain access to the same Internet applications and content on their laptop computers that they can on a desktop computer, cell phones and other small handheld mobile devices may provide access to fewer applications and services or to limited versions of those applications and services or both. The widespread use of wireless devices and the minimal need for infrastructure deployment to reach rural areas could position wireless providers and fixed WiMax providers as gap fillers in the pursuit of ubiquitous broadband availability.

Effect of Broadband Prices

Providers must balance the cost of upgrades to speed and capacity against customer willingness to pay.

The focus of the discussion to this point is on how changing customer needs and expectations are creating a need for upgrades to the capacity and speed of the Internet; however, there is also a question of whether people who do not want or need these expanded capabilities and speed will pay for infrastructure upgrades. Providers must balance the cost of upgrades to speed and capacity against customers' willingness to pay.

If broadband and Internet access providers start charging customers more to pay for expanded capabilities, some people may cancel their Internet service subscriptions or never subscribe in the first place. Unfortunately, there is little, if any, publicly available data regarding the prices for Internet access services and whether those prices influence decisions regarding Internet subscribership. If the FCC develops new rules regarding the collection of data on broadband pricing as it has indicated it might, useful Internet pricing data may become publicly available in the future.²⁶

Indiana Deployment Statistics

In HEA 1279, the General Assembly required the IURC to report on “... the effects of competition and technological change on universal service and on pricing of all telecommunications services offered in Indiana.”²⁷ The IURC believes that the status of the deployment of broadband services is one of the most important elements of technological change on which to report.

The following charts, graphs and discussion related to broadband deployment are based upon June 30, 2007 FCC data. This data used the FCC’s definition of a broadband or high-speed connection in effect at that time, which was a connection that provided access to the Internet at a speed “exceeding 200 Kbps in at least one direction.” This is in contrast to the standard set forth in HEA 1279 that is at least 384 Kbps upstream and 1.5 Mbps downstream; however, the FCC data represents the most comprehensive data available to us.

The total number of broadband connections grew significantly in the last year; however, most of the growth in connections was reported at lower speeds.

The total number of broadband connections grew significantly in the last year; though most of the growth in connections was reported at lower speeds. This is encouraging because over the past few years Indiana consistently lagged behind the U.S. as a whole in the number of broadband connections deployed per 100 persons.

²⁶ WC Docket No. 07-38, Notice of Proposed Rulemaking, paras. 45 – 47 (FCC 07-17, rel. April 16, 2007), *Broadband and VoIP Data Collection R&O and FNPRM*, paras. 37, 38.

²⁷ I.C. 8-1-2.6-4(c)(1).

As of June 30, 2007, Indiana had a lower percentage (25.97%) of total broadband connections operating at a rate exceeding 200 kbps in one direction and between 2.5 Mbps and 10 Mbps in the faster direction than the U.S. as a whole (37.34%). Both the Indiana and the U.S. percentage in this faster speed range fell between June 30, 2006 and June 30, 2007 even as the total number of connections increased.

According to June 30, 2007 FCC data, mobile wireless service, cable modem service and DSL each accounted for about a third of the 100,921,647 total U.S. broadband connections. Collectively, these three categories accounted for 96.34% of the U.S. total.

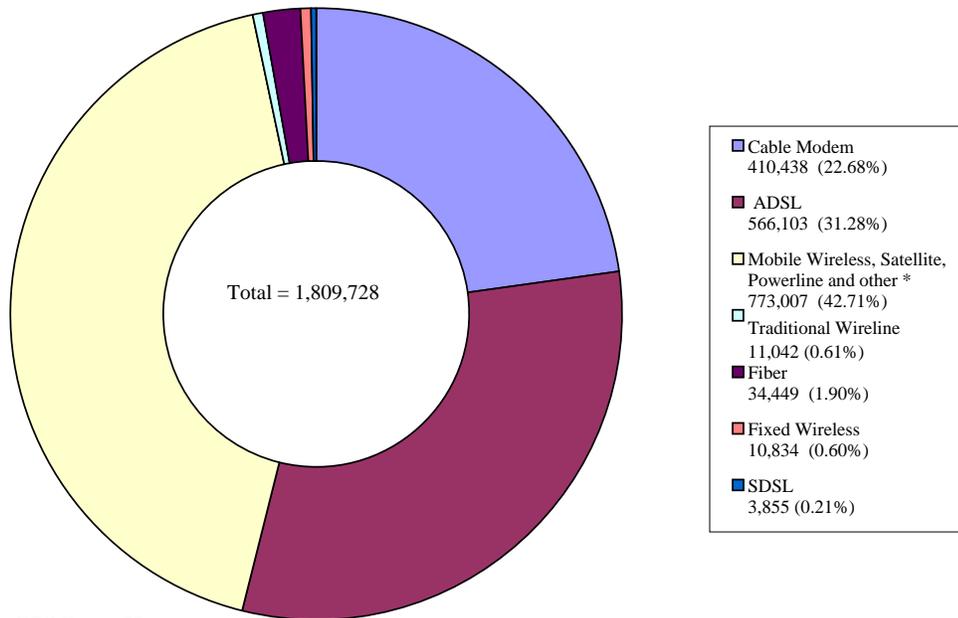
Indiana broadband connections increased by 616,469 which is a 52% increase over the number of connections reported one year ago.

Indiana broadband connections increased by 616,469, which is a 52% increase over the number of connections reported one year ago. As of June 30, 2007, there were 773,007 broadband connections in the category that aggregates mobile wireless, satellite, broadband over power lines (BPL) and "Other". That is 42.71% of the 1,809,728 total Indiana broadband connections. There were 559,669 new connections in that category, which represents a 262.34% increase in the number of connections in that category over last year. This growth is significant; many customers purchased new broadband connections in the last year. Many of those new connections were mobile wireless connections, which typically are lower speed connections. Between June 30, 2006 and June 30, 2007, the number of cable modem connections decreased by almost 80,000 while the number of DSL connections increased by approximately 122,000. Together, wireless, cable modem and DSL continue to account for 97% of the total broadband connections, as of June 30, 2007.

Chart 1

Indiana Broadband Connection by Technology As of June 30, 2007

(Exceeding 200Kpbs in at least one direction)



Source: FCC Form 477

Due to the lag in publication of data by the FCC, the most recent broadband deployment data available from the FCC is for June 30, 2007. The Commission obtained data through the end of 2007 from a number of providers. Many Indiana broadband providers voluntarily shared data provided to, but not yet released by, the FCC. This information made it possible for the Commission to provide a limited picture of the status of broadband deployment in Indiana as of December 31, 2007. However, December 31, 2007 data does not include every company that completed an FCC Form 477, and we do not have access to nationwide data for that period at this time. Therefore, direct comparisons between data for December 31, 2007 and prior periods are not possible. Nevertheless, it appears that the companies for which we have December 31, 2007 Form 477 data, provided at least 98% of all Indiana broadband connections reported to the FCC for the first six months of 2007.

This more current data indicates that since June 30, 2007, the number of broadband connections in Indiana meeting the FCC's definition of broadband grew from 1,809,728

to at least 2,206,981 as of Dec. 31, 2007. This is an increase of 397,253 connections or 22% from June 30, 2007 levels. The aggregated category that includes terrestrial mobile wireless²⁸, satellite, broadband over power line and “other” technologies had at least 1,113,861 connections. This is an increase of 340,854 connections or 44% in just six months. The data shows there were at least 606,850 connections using some form of DSL, a 6% increase over June 30, 2007 and at least 438,483 cable modem connections as of December 31, 2007, which is also a 6% increase over June 30, 2007. Other categories used by the FCC include: “traditional wireline,” fiber and terrestrial fixed wireless. These last three categories, combined, accounted for fewer than 50,000 connections, which is a decrease from June 30, 2007.

Broadband Availability

The FCC reports that 79% of Indiana residential households in areas where incumbent local exchange carriers (ILECs) offer local telephone service had access to some form of DSL, collectively known as xDSL. The corresponding figure for the U.S. as a whole is 82%. In Indiana locations where cable systems offer cable television service, 94% of households had access to cable modem service; the U.S. average was 96%.²⁹ It is important to note that these percentages only reflect the maximum share of residential housing units that could have had access to the Internet in 2007 using xDSL or cable modem broadband connections; they do not measure “take” rates or actual adoption rates.

Where non-rural ILECs serve rural exchanges, the percentage of high-speed availability is often lower because the non-rural ILEC does not have access to universal service support.

Within the ILEC xDSL service percentages, there is a notable difference in xDSL availability between large ILEC territories (78%) and small ILEC territories (88%). The aggregate percentage of high-speed availability in rural exchanges served by the large ILECs³⁰ (73.8%) shows an even greater disparity. This could be explained by the fact

²⁸ The “terrestrial mobile wireless” category includes broadband connections established using devices such as laptop computers, smart phones, PDAs, etc.

²⁹ Source: *High-Speed Services for Internet Access: Status As of June 30, 2007*, Table 14, FCC Industry Analysis and Technology Division - Wireline Competition Bureau, March 2008.

³⁰ Indiana’s large ILECs are AT&T, Verizon and Embarq.

that the large ILECs have larger geographic areas to cover and the fact that small companies have access to funding to update their networks through universal service support or loans from the Rural Utilities Service (RUS) that are not available for the large ILECs.

Table 4

xDSL and Cable Modem Broadband Availability Percentages, as of June 30, 2007		
	xDSL Availability Where ILECs Offer Local Telephone Service	Cable Modem Availability Where Cable Systems Offer Cable TV Service
Total U.S. Weighted Avg. Availability %	82%	96%
Total IN Weighted Avg. Availability %	79%	94%
3 Largest IN ILECs - xDSL Avg. Availability %	78%	
All Other IN ILECs - xDSL Avg. Availability %	88%	
<i>Source: FCC Form 477 Data; High-Speed Services for Internet Access: Status As of June 30, 2007, Table 14 (FCC Report, March, 2008).</i>		

The percentage of Indiana cable television subscribers that could also subscribe to cable modem service was higher than the percentage of Indiana local telephone customers (served by ILECs) that could also subscribe to xDSL broadband service. However, as of June 30, 2007, the number of actual xDSL subscribers in Indiana (566,103) was higher than the number of actual cable modem subscribers (410,483). The higher availability of cable modem service can be at least partly explained by the existence of different legal obligations for ILECs versus cable providers and different technical limitations on xDSL and cable modem service.

Currently, all Indiana ILECs have provider of last resort obligations which means they must be prepared to provide basic telecommunications service throughout their respective local service territories. Cable companies do not have such an obligation.³¹ In order to carry out this obligation, ILECs sometimes have to extend their lines over long distances or beyond certain municipal boundaries. Cable companies do not provide cable TV service to customers who live outside the boundaries of their cable TV franchise areas, which are typically relatively densely-populated areas. Although extending these ILEC telephone lines ensures that more people can receive basic local telephone service,

³¹ I.C. 8-1-2-32.4-9, I.C. 8-1-2-32.4-11.

it has the opposite effect on the availability of xDSL service. When a customer is farther than approximately three miles from the telephone company's central office, DSL service is less effective. Cable modem service does not appear to be affected by the same kind of distance limitations which are technology-driven.

Even though most zip code areas are served by four or more providers, it does not mean broadband is available to residents in the entire zip code.

Table 5 below shows that at least some portion of every Indiana zip code area has broadband available. Some zip codes are served by multiple providers. This does not mean, however, that broadband is available in the entirety of any zip code area.³²

Table 5

Number of 5-Digit Geographic Zip Codes with Number of Holding Companies Providing One or More Broadband Connections in Indiana as of June 30, 2007	
<u>Number of Zip Codes</u>	<u>Number of Holding Companies</u>
0	0
0	1
21	2
41	3
179	4 - 5
351	6 - 9
96	10 or more
TOTAL	688
Source: <i>High-Speed Services for Internet Access: Status As of June 30, 2007</i> , Table 17. FCC Industry Analysis and Technology Division - Wireline Competition Bureau. March 2008.	

³² In its Form 477, the FCC asks companies to list the zip codes in which they provided at least one broadband connection in the reporting period. If a provider lists one broadband connection in a particular zip code, the entire zip code is considered to have high-speed lines in place. This creates a misleading picture of the status of broadband deployment. Note also, the FCC broadband data does not fully capture the mobile nature of wireless traffic.

IV. FEDERAL ISSUES OF INTEREST

Federal-State Joint Conference on Advanced Services

The facilitation of widespread deployment of and access to advanced services is the foundation of economic development for Indiana.

The facilitation of widespread deployment of and access to advanced services is the foundation of economic development for Indiana. In order to reap the benefits of advanced technologies, however, the FCC noted that we must move closer to achieving the goal of ensuring that these technologies and services can be accessed meaningfully by all Americans, whether they live in urban or rural areas, are economically disadvantaged or have disabilities.

To accomplish this, the FCC convened a Federal-State Joint Conference pursuant to section 410(b) of the Communications Act to provide a forum for an ongoing dialogue between the FCC, the states and local and regional entities regarding the deployment of advanced telecommunications capabilities. The Federal-State Joint Conference on Advanced Telecommunications Services furthers that goal by facilitating the cooperative development of federal, state and local mechanisms and policies to promote the widespread deployment of advanced services. In addition, the Joint Conference examines the relevant state and federal regulations to which carriers are subject and whether, and to what extent, those regulations are affecting the widespread deployment of advanced services. Indiana interests are being promoted at the highest levels of this debate. The voices at the federal and regional levels, respectively, are presented by Commissioner Larry S. Landis and a senior staff advisor.

Federal-State Joint Board on Universal Service

In a Recommended Decision forwarded to the FCC in November 2007, the Joint Board proposed a change in policy aimed at curbing the explosive growth in high-cost universal service support³³ disbursements. Specifically, the Joint Board recommended

³³ High-cost support ensures that consumers in all regions of the nation have access to and pay rates for telecommunications services that are reasonably comparable to those services provided and rates paid in urban areas. Without high-cost support, residents of some areas of the country would have to pay (cont')

that the FCC impose an interim, emergency cap on the amount of high-cost support that competitive eligible telecommunications carriers (CETCs), primarily wireless companies, may receive state by state based on the average level of competitive ETC support distributed in that state in 2006.³⁴ The Joint Board also recommended that the FCC further explore comprehensive high-cost distribution reform. As part of that effort, in a companion Public Notice, the Board sought comments on various proposals to reform the high-cost universal service support mechanisms.³⁵ The Board also committed to making further recommendations regarding comprehensive high-cost universal service reform within six months of this Recommended Decision.

Indiana received approximately \$58 million in high-cost support. With federal support monies, Indiana carriers, including the CETCs, utilize funds to maintain affordable rates while also providing advanced services to their customers.

The FCC moved forward with the recommendation of the Joint Board by adopting the emergency, interim cap on the high-cost portion of the fund and set out for additional comment the Joint Board's recommendations on comprehensive reform. At present the Universal Service Fund is in excess of \$4.5 billion.³⁶ It provides approximately \$4 billion per year in high-cost support.³⁷ As recently as 2001, high-cost support totaled just \$2.6 billion. Indiana received approximately \$58 million in high-cost support, approximately \$5.5 million of which goes to CETCs. With federal support monies, Indiana carriers, including the CETCs, utilize funds to maintain affordable rates while also providing advanced services to their customers.

significantly more for telephone services than those living in other areas because of factors such as physically difficult terrain, low population density or the high fixed costs of building a telecom network. The primary participants in the High-Cost Program are rural and, to a lesser extent, some non-rural incumbent local exchange carriers and competitors that serve customer lines in those high-cost areas. In order to participate in the High-Cost Program, a wireline or wireless telephone company must be an eligible telecommunications carrier (ETC). A telephone company can become an ETC by designation of its state utility regulator, or in some cases, the Federal Communications Commission.

³⁴ The interim cap will apply to all of the existing high-cost support mechanisms: high-cost loop support (including safety net support and safety valve support), local switching support, high-cost model support, interstate common line support, and interstate access support.

³⁵ *Federal-State Joint Board on Universal Service Seeks Comment on Long Term, Comprehensive High-Cost Universal Service Reform*, WC Docket 05-337, CC Docket No. 96-45, Public Notice, FCC 07J-2 (rel. May 1, 2007) (*May 2007 Public Notice*).

³⁶ *Id.*

³⁷ *See, Universal Service Monitoring Report*, CC Docket No. 98-202, Prepared by the Federal and State Staff for the Federal-State Joint Board on Universal Service in CC Docket No. 96-45, Table 3.2 (2006) (*Universal Service Monitoring Report*).

The IURC filed comments in this docket in support of the Joint Board's recommendations. Indiana is also represented on the Joint Board by Commissioner Larry S. Landis with a senior staff advisor serving as the staff chairperson. This role allows Indiana to remain at the forefront of the dialogue, while preserving our own state's competitive interests.

Universal Service in Rural Exchanges of Large ILECs

Determining support based on the characteristics of the incumbent serving a particular area creates disparity in the level of broadband access available to customers served by small rural ILECs and those served by large non-rural ILECS in rural exchanges.

In its comments, the IURC stated that support to high-cost rural areas should not be determined by the characteristics of the incumbent serving a particular area. In situations where a non-rural ILEC serves rural exchanges, customers can be disenfranchised. This is because the non-rural ILEC does not have access to universal service support, which may yield a disincentive to invest and sustain the highest quality of service in high cost areas and invest in advanced technologies including broadband. This creates a disparity in the level of broadband access available to customers served by small rural ILECs and those served by large non-rural ILECS in rural exchanges. The Commission hopes that the FCC will act on its comments in a way that will have a beneficial effect on broadband deployment to underserved areas of Indiana.

Changing Data Collection and Reporting Methods

On March 19, 2008, the FCC adopted several important procedures to increase the quality and accuracy of broadband data it collects through its Form 477. On June 12, the FCC released an order describing these improvements and also proposed further rules that may result in additional orders or final rules being adopted later.³⁸ The FCC's actions will affect companies differently, depending on the type of technology a particular company uses to deploy broadband facilities or provide broadband service to its customers. The order suggests that the FCC recognizes that the definition of

³⁸ WC Docket No. 07-38, *Report and Order and Further Notice of Proposed Rulemaking*, (FCC 08-89, rel. June 12, 2008).

broadband must evolve over time³⁹ and that its actions have the potential to improve the accuracy and the usefulness of its broadband data collection efforts regarding both unserved and underserved areas.⁴⁰ These changes should improve the amount and quantity of information available to this Commission regarding broadband availability, the location of broadband connections, the percentage of residential vs. non-residential connections, and upload and download speeds in Indiana.

The Commission will evaluate the implications of the following changes on our own broadband data collection and reporting activities as they evolve over time: broadband technologies, the FCC's broadband definition, and data collection and reporting methods. This will enable the Commission to provide better Indiana-specific broadband data to the members of the Regulatory Flexibility Committee and the Indiana General Assembly.

³⁹ *Id.* "Statement of Commissioner Michael J. Copps, Approving in Part and Concurring in Part" (March 19, 2008).

⁴⁰ *Id.* "Statement of Chairman Kevin J. Martin" (March 19, 2008).

V. APPENDICES

Appendix A – Telecommunications Utility Revenues

Telecommunications Utility Revenues

For Year Ended December 31, 2007
(As Reported in 2008 Public Utility Fee Reports)

Utility Name	Operating Revenue
Indiana Bell Telephone Company, Inc.	\$ 662,456,985
Verizon Wireless	587,028,161
AT&T Mobility	349,813,015
Verizon North Inc. – Indiana	266,029,221
WirelessCo, LP	231,889,894
Nextel West Corp.	142,666,733
United Telephone Company of Indiana, Inc.	94,314,866
T-Mobile Central, LLC	78,419,868
SBC Long Distance, LLC	53,168,366
AT&T Communications of Indiana, GP	43,101,496
MCI Communications Services, Inc.	34,818,741
Centennial Cellular Corporation	29,365,474
Comcast Phone of Central Indiana, LLC	26,781,518
NPCR, Inc.	22,724,127
US Xchange of Indiana, LLC	22,482,999
Bell Atlantic Communications, Inc.	20,747,155
MCImetro Access Transmission Services, Inc.	17,685,507
tw telecom of Indiana, lp	13,908,554
Egix, Inc.	12,964,164
Smithville Telephone Co., Inc.	12,534,923
SIGECOM, LLC	12,182,424
Ameritech Advanced Data Services of Indiana, Inc.	11,850,553
McLeodUSA Telecommunications Services, Inc.	11,637,983
Embarq Communications, Inc. f/k/a Sprint Long Distance	11,117,942
United States Cellular Operating Company of Chicago, LLC	10,638,391
Evercom Systems, Inc.	10,401,157
Sage Telecom, Inc.	9,356,716
Bright Personal Communications Services, LLC	8,833,369
Northwestern Indiana Telephone Company, Inc.	*8,648,797
Clay County Rural Telephone Co-op., Inc	6,855,775
FBN Indiana, Inc.	*6,641,308
Qwest Communications Corporation	6,276,353
Powertel Memphis, Inc.	6,026,070
Communications Venture Corp.d/b/a INdigital Telecom	6,013,182
Insight Phone of Indiana, LLC	5,778,584
Global Tel*Link Corporation	5,461,014
USA Mobility Wireless, Inc.	5,152,236
Hancock Telecom	5,071,779
Granite Telecommunications, LLC	5,031,572
US Signal Company, LLC	4,987,046

Communications Corporation of Indiana	4,599,280
Indiana Paging Network, Inc.	4,570,374
Sprint Communications Company, LP	4,442,642
TransWorld Network, Corp.	4,317,805
Perry Spencer Rural Telephone Cooperative, Inc.	4,182,922
Norlight, Inc.	4,165,737
T-NETIX Telecommunications Services, Inc.	3,994,438
Indiana RSA No. 4	3,909,293
Rochester Telephone Company, Inc.	3,649,467
TCG Indianapolis	3,637,141
Southeastern Indiana Rural Telephone	3,477,282
NuVox Communications of Indiana, Inc.	3,302,391
Cincinnati Bell Telephone Co.	*3,172,908
Midwest Telecom of America, Inc.	2,989,660
France Telecom Corporate Solutions, LLC	*2,356,964
Miles Communications Corporation	2,205,365
Comtel Telecom Assets, LP	2,172,737
Sunman Telecommunications Corporation	2,148,209
Trinsic Communications, Inc.	*2,077,660
PNG Telecommunications, Inc.	2,003,868
Neutral Tandem-Indiana, LLC	1,976,026
Daviess-Martin County Rural Telephone Corp.	1,939,948
Budget PrePay, Inc.	1,902,086
Tipton Telephone Company, Inc.	1,876,099
Cypress Communications Operating Company, LLC.	*1,730,126
Ligonier Telephone Company, Inc.	1,718,613
Lightyear Network Solutions, LLC	1,700,291
Fiber Technologies Networks, LLC	1,678,647
CenturyTel of Central Indiana, Inc.	1,666,246
Talk America, Inc.	1,609,728
Verizon Select Services, Inc.	1,596,674
Tri-County Telephone Company, Inc.	1,563,256
Cincinnati Bell Wireless, LLC	1,537,571
New Paris Telephone, Inc.	1,483,400
BullsEye Telecom, Inc.	1,420,781
Trans National Communications International, Inc.	1,415,164
TDS Metrocom	1,392,495
Smithville Telecom, LLC	1,370,410
Independent Telecommunications Systems, Inc.	1,344,923
Washington County Rural Telephone Cooperative, Inc.	1,247,593
Frontier Communications of Thorntown, LLC	1,164,480
Citizens Telephone Corporation	1,138,165
Time Warner Cable Information Services (Indiana), LLC	1,124,811
Pulaski White Telephone	1,124,000
OnStar Corporation	1,104,823
First Communications, LLC	1,093,118
Norlight Telecommunications, Inc.	1,086,680
Frontier Communications of Indiana, LLC	1,076,921
HELIO LLC	1,068,827
Central Indiana Communications, Inc.	1,062,040

Home Telephone Company of Pittsboro, Inc.	1,046,907
Home Telephone Company, Inc.	1,007,585
Mulberry Co-op Telephone	1,000,648
Navigator Telecommunications, LLC	966,427
American Messaging Services, LLC	*963,832
Matrix Telecom, Inc.	920,477
Leapfrog Communications, LLC	*916,453
Ernest Communications, Inc.	884,157
CenturyTel of Odon, Inc.	867,838
CIMCO Communications, Inc.	832,620
Communications Corporation of Southern Indiana	819,173
Craigville Telephone Company, Inc.	782,847
Monon Telephone Company, Inc.	731,777
Intellicall Operator Services, Inc.	726,839
RTC Communications Corp.	725,379
Cinergy MetroNet, Inc.	725,026
Camden Telephone Company, Inc.	698,194
Sweetser Rural Telephone Company, Inc.	691,950
Public Communications Services, Inc.	671,560
Consumer Cellular, Inc.	620,413
United Communications Systems, Inc.	614,731
Sunman Telecommunications Corporation Long Distance	581,715
CloseCall America, Inc.	581,522
AMI Communications, Inc.	553,269
IDT America, Corp.	539,284
Integrated Business Communications, Inc.	*505,006
Network Innovations, Inc.	499,856
Perry-Spencer Communications, Inc.	487,219
Bloomington Home Telephone Company, Inc.	466,303
Broadwing Communications, LLC	465,897
ClearTel Telecommunications, Inc.	464,838
HRS Internet, LLC d/b/a Lightbound	453,127
E.Com Technologies, LLC	441,383
Yeoman Telephone Company, Inc.	441,174
Combined Public Communications, Inc.	410,134
New Lisbon Telephone Co., Inc.	401,607
Teleconnect Long Distance Services and Systems Company	357,581
Global Crossing Telecommunications, Inc.	353,746
Metropolitan Telecommunications of Indiana, Inc.	331,661
TTI National, Inc.	325,215
Aero Communications, LLC	304,826
West Point Telephone Company, Inc.	300,247
Merchants & Farmers Telephone Company, Inc.	298,950
Swayzee Telephone Company, Inc.	296,929
USA Digital Communications, Inc.	293,745
Indiana RSA No. 5	293,561
1-800-RECONEX, Inc.	275,679
Geetingsville Telephone Company, Inc.	272,521
Coin Phones, Inc.	270,273
American Broadband, Inc.	268,389

Cincinnati Bell Any Distance, Inc.	263,219
Telrite Corporation	261,400
Frontier Communications of America	260,004
Network Communications International Corp.	251,746
First Choice Technology, Inc.	251,179
CAT Communications International, Inc.	*249,257
CenturyTel Long Distance, LLC	249,089
dPi-TELECONNECT, LLC	242,369
Mitel NetSolutions, Inc.	231,992
Kiva Telecommunications, Inc.	*230,550
ACN Communication Services, Inc.	230,199
BellSouth Long Distance, Inc.	223,049
Citynet Indiana, LLC	220,065
Globalcom, Inc.	217,616
The Dodson Group, Inc.	204,920
Camarato Distributing, Inc.	*202,659
NOSVA Limited Partnership	195,869
Zone Telecom, Inc.	184,894
S & W Telephone Co.	182,390
ElectriCom Networks, LLC	178,567
Inmate Calling Solutions, LLC	169,279
FairPoint Carrier Services, Inc.	163,072
Primus Telecommunications, Inc.	161,448
TRI-M Communications, Inc.	157,656
Comcast Business Communications, Inc.	153,384
NEXTG Networks of NY, Inc.	149,999
Custom Teleconnect, Inc.	144,989
NOS Communications, Inc.	141,771
Nexus Communications, Inc.	140,817
i-wireless, LLC	140,586
Discount Utilities, LLC	138,179
Touchtone Communications, Inc.	134,852
US LEC Communications, Inc.	132,680
Access2Go, Inc.	130,212
Vanco Direct USA, LLC	129,000
XO Communications Services, Inc.	128,153
Total Call Mobile, Inc.	123,132
Syniverse Technologies, Inc.	122,599
UCN, Inc.	116,043
Unitycomm, LLC	*115,799
Richmond Communications	*110,642
AccessLine Communications Corporation	108,213
ACME Communications, Inc.	107,863
Global Crossing Local Services, Inc.	105,525
Business Network Long Distance, Inc.	98,437
Phone1, Inc.	90,144
Opex Communications, Inc.	88,716
Twin City Capital, LLC	86,707
National Brands, Inc.	81,162
DeltaCom, Inc.	76,717

EliteView, LLC	74,779
Long Distance Consolidated Billing Co.	74,262
Cause Based Commerce, Inc.	73,210
SEI Data, Inc.	71,262
Midwestern Telecommunications, Inc.	70,542
LDC Telecommunications, Inc.	69,934
C.M., Inc.	67,045
LDMI Telecommunications, Inc.	66,553
Paetec Communications, Inc.	64,772
Norstan Network Services, Inc.	*64,711
Ligtel Communications, Inc.	64,583
Reduced Rate Long Distance, LLC	64,499
Win.Net Telecommunications, Inc.	*64,400
Network PTS, Inc.	64,274
AmeriVision Communications, Inc.	62,048
St. Vincent Hospital And Health Care Center, Inc.	*61,863
Total Call International, Inc.	61,680
Enhanced Communications Group, LLC	61,440
Telegration, Inc.	60,028
Zayo Bandwidth Indiana, LLC	60,000
Working Assets Funding Service, Inc.	59,272
Infinity Networks, Inc.	54,967
Global Telecom & Technology Americas, Inc.	50,940
WilTel Communications, LLC	50,331
Level 3 Communications, LLC	48,886
GLOBALSTAR USA, LLC	47,540
Online Savings, Inc.	47,150
American Fiber Network, Inc.	45,575
X2Comm, Inc.	45,073
National Access Long Distance, Inc.	44,462
Covista Communications, Inc.	42,906
Total Telecommunications Revenues	\$ 3,035,515,325

**Data estimated based on Telecommunication Carriers' 2006 Gross Intrastate Telecommunications Revenues*

Appendix B – U.S. Broadband Connections by Technology

The following table shows a comparison between the technology-specific U.S. broadband connection data reported by the FCC for the periods ending June 30, 2006 and June 30, 2007:

U.S. Broadband Connections by Technology <i>2006-2007 Comparison</i>						
Technology Type	# of Connections				% of Total	
	<u>2006</u>	<u>2007</u>	2006-07 Change by Technology Type		<u>2006</u>	<u>2007</u>
Cable Modem	28,513,500	34,408,553	5,895,053	20.67%	44.13%	34.09%
ADSL	22,575,010	27,516,171	4,941,161	21.89%	34.94%	27.26%
Mobile Wireless	11,015,968	35,305,253	24,289,285	220.49%	17.05%	34.98%
Fiber	700,083	1,402,652	702,569	100.36%	1.08%	1.39%
Traditional Wireline	610,722	708,722	98,000	16.05%	0.95%	0.70%
Satellite	495,365	668,803	173,438	35.01%	0.77%	0.66%
Fixed Wireless	360,976	586,141	225,165	62.38%	0.56%	0.58%
SDSL	337,438	319,932	(17,506)	-5.19%	0.52%	0.32%
Power Line and Other	5,208	5,420	212	4.07%	0.01%	0.01%
Total	64,614,270	100,921,647	36,307,377		100.00%	100.00%
<i>Source: "High-Speed Services for Internet Access: Status as of June 30, 2006" and "High-Speed Services for Internet Access: Status as of June 30, 2007", Table 9, Industry Analysis and Technology Division, Wireline Competition Bureau (FCC: January 2007 and March 2008).</i>						

As Appendix B shows, the collective share of the total U.S. broadband connections represented by the cable modem, ADSL and Mobile Wireless categories remained almost constant; however, the relative shares of these three categories changed dramatically from 2006 to 2007. As we reported last September, as of June 30, 2006, FCC data showed that cable modem service accounted for 44.13% of the 64,614,270 total U.S. broadband connections. ADSL accounted for 34.94% and mobile wireless accounted for 17.05%. Together, these three technologies accounted for 96.12% of all U.S. broadband connections, as of June 30, 1996.

Appendix C – Indiana Broadband Connections by Technology

The following table shows a comparison between the technology-specific Indiana broadband connection data reported by the FCC for the periods ending June 30, 2006 and June 30, 2007:

Indiana Broadband Connections by Technology						
<i>2006-2007 Comparison</i>						
Technology Type	# of Connections				% of Total	
	<u>2006</u>	<u>2007</u>	<u>2006-2007 Change by Technology Type</u>		<u>2006</u>	<u>2007</u>
Cable Modem	490,020	410,438	(79,582)	-16.24%	41.07%	22.68%
ADSL	443,473	566,103	122,630	27.65%	37.16%	31.28%
Mobile Wireless, Satellite, Powerline and Other	213,338	773,007	559,669	262.34%	17.88%	42.71%
Traditional Wireline	13,291	11,042	(2,249)	-16.92%	1.11%	0.61%
Fiber	22,192	34,449	12,257	55.23%	1.86%	1.90%
Fixed Wireless	6,296	10,834	4,538	72.08%	0.53%	0.60%
SDSL	4,649	3,855	(794)	-17.08%	0.39%	0.21%
Total	1,193,259	1,809,728	616,469		100.00%	100.00%
<i>Source:</i> "High-Speed Services for Internet Access: Status as of June 30, 2006" and "High-Speed Services for Internet Access: Status as of June 30, 2007", Table 9, Industry Analysis and Technology Division, Wireline Competition Bureau (FCC: January 2007 and March 2008).						
* Mobile Wireless, Satellite, Broadband over Powerline, and Other were combined to preserve confidentiality.						

As with the U.S. figures, these 2007 figures represented considerable change over the 2006 Indiana figures. As we reported last September, as of June 30, 2006, FCC data showed that cable modem service accounted for 41.07% of the 1,193,259 total Indiana broadband connections. ADSL made up 37.16% of the total. The aggregated category of mobile wireless, satellite, broadband over power lines (BPL) and “other” accounted for 17.88% of the total Indiana broadband connections. Together, these three categories represented 96% of the Indiana total, as of June 30, 2006. Thus, their collective share of the total Indiana broadband connections remained almost constant; however, the relative shares of these three categories changed dramatically.

Appendix D – FCC Registered Video Service Providers Active in Indiana

Adams

Comcast (formerly Insight)
Mediacom Indiana, LLC

Allen

Comcast
Mediacom Indiana, LLC
Verizon North

Bartholomew

Avenue Broadband Communications (formerly Charter)
Comcast

Benton

Comcast (formerly Insight)
Full Choice Communications

Blackford

Comcast

Boone

AT&T
Bright House Networks, LLC
Longview Cable and Data, LLC
Full Choice Communications
Comcast (formerly Insight)

Brown

Avenue Broadband Communications (formerly Interlink)
Comcast (formerly Insight)

Carroll

Comcast

Cass

Comcast (formerly Insight)
Full Choice Communications
Galaxy American Communications

Clark

Insight Communications Midwest, LLC

Clay

Avenue Broadband Communications (formerly Interlink)
Cequel III Communications II, LLC
Glass Antenna Systems

Clinton

Comcast
Mulberry Cooperative Telephone Company, Inc.
Tri-County Communications Corp

Crawford

Avenue Broadband Communications (formerly Charter)

Daviess

Avenue Broadband Communications (formerly Charter)
Cequel III Communications II, LLC
Daviess Martin Rural

De Kalb

Mediacom Indiana, LLC

Dearborn

Comcast
Sunman Cablevision Company
Time Warner Entertainment Company, LP

Decatur

Comcast
Sunman Telecommunications Corporation

Delaware

AT&T
Comcast
Longview Cable and Data, LLC

Dubois

Avenue Broadband Communications (formerly Charter)
Insight Communications Midwest, LLC
Perry-Spencer Communications, Inc.

Elkhart

Comcast
Mediacom Indiana, LLC
New Paris Telephone's Quality Cablevision, Inc

Fayette

Comcast

Floyd

Insight Communications Midwest, LLC

Fountain

Comcast
Insight Communications Midwest, LLC

Franklin

Comcast

Fulton

Comcast
Full Choice Communications
Galaxy American Communications
RTC Communications Corporation
TV Cable of Winamac, Inc.

Gibson

Avenue Broadband Communications (formerly Charter)
Cequel III Communications II, LLC
Insight Communications Midwest, LLC
P.C. One Cable

Grant

Bright House Networks, LLC
Comcast (formerly Insight)
Longview Cable and Data, LLC
Oak Hill Cablevision, Inc
The Swayzee Telephone Co, Inc.

Greene

Cequel III Communications II, LLC
Comcast (formerly Insight)

Hamilton

AT&T
Bright House Networks, LLC
Comcast
Longview Cable and Data, LLC

Hancock

AT&T
Bright House Networks, LLC
Comcast (formerly insight)
Indiana Fones, Inc.

Harrison

Time Warner Cable
Insight Communications Midwest, LLC

Hendricks

AT&T
Avenue Broadband Communications (formerly Charter)
Bright House Networks, LLC
Comcast

Henry

Comcast (formerly Insight)
Indiana Fones, Inc.

Howard

AT&T
Comcast (formerly Insight)

Huntington

Citizens Telephone Corp
Comcast
Longview Cable and Data, LLC

Jackson

Cinergy MetroNet
Comcast
Insight Communications Midwest, LLC

Jasper

Comcast
Mediacom Indiana, LLC
TV Cable of Rensselaer, Inc

Jav

Comcast (formerly Insight)

Jefferson

Time Warner

Jennings

Comcast

Johnson

AT&T
Avenue Broadband Communications (formerly Charter)
Comcast

Knox

Avenue Broadband Communications (formerly Interlink)
Cequel III Communications II, LLC
P.C. One Cable

Kosciusko

Comcast
Longview Cable and Data, LLC
Mediacom Indiana, LLC

La Porte

Comcast
Mediacom Indiana, LLC

Lagrange

Comcast
Mediacom Indiana, LLC

Lake

AT&T
Comcast
Mediacom Indiana, LLC
WideOpen West Illinois, LLC

Lawrence

Avenue Broadband Communications (formerly Interlink)
Comcast (formerly Insight)
Daviess Martin County Rural

Madison

AT&T
Bright House Networks, LLC
Comcast (formerly Insight)
Longview Cable and Data, LLC

Marion

AT&T
Bright House Networks, LLC
Comcast

Marshall

Comcast
Mediacom Indiana, LLC
Twfanch-One Company

Martin

Avenue Broadband Communications (formerly Charter)
Cequel III Communications II, LLC (Now Suddenlink)
Daviess Martin County Rural
Rapid Acquisition Co., LLC

Miami

Comcast
Full Choice Communications
Oak Hill Cablevision, Inc

Monroe

Comcast (formerly insight)

Montgomery

Accelplus
Comcast
Full Choice Communications
Galaxy American Communications
Tri-County Communications Corp

Morgan

Avenue Broadband Communications (formerly Charter)
Comcast
Clay County Rural Telephone Co.

Newton

Mediacom Indiana, LLC
TV Cable of Rensselaer, Inc

Noble

Comcast
Ligtel Communications, Inc.
Mediacom Indiana, LLC

Ohio

Comcast

Orange

Avenue Broadband Communications (formerly Charter)

Owen

Comcast (formerly Insight)

Parke

Cequel III Communications II, LLC
Full Choice Communications
Rapid Acquisition Co., LLC

Perry

Avenue Broadband Communications (formerly Charter)
Comcast
Perry-Spencer Communications, Inc.

Pike

Avenue Broadband Communications (formerly Charter)

Porter

Comcast
Mediacom Indiana, LLC

Posey

Insight Communications Midwest, LLC
Telecommunications Management, LLC
Sigecom, LLC

Pulaski

Mediacom Indiana, LLC
TV Cable of Winamac, Inc.

Putnam

Cinergy Metronet, Inc
Clay County Rural Telephone Cooperative, Inc.
Galaxy American Communications
Glass Antenna Systems, Inc.
Comcast (formerly Insight)

Randolph

Comcast
Time Warner Entertainment Company, LP

Ripley

Comcast
Enhanced Telecommunications Corporation aka Sunman
Miles Communication

Rush

Comcast

Scott

Insight

Shelby

Comcast (formerly Insight)

Spencer

Avenue Broadband Communications (formerly Charter)
Perry-Spencer Communications, Inc.
Time Warner

St Joseph

Comcast
Mediacom Indiana, LLC
Twfanch-One Company

Starke

Mediacom Indiana, LLC

Steuben

Mediacom Indiana, LLC

Sullivan

Cequel III Communications II, LLC
Comcast (formerly Insight)
P.C. One Cable

Switzerland

Time Warner

Tippecanoe

Comcast
Tri-County Communications Corp

Tipton

Comcast (formerly Insight)

Union

Comcast
Time Warner Entertainment Company, LP

Vanderburgh

Insight Communications Midwest, LLC
Sigecom LLC
Telecommunications Management, LLC
Twfanch-One Company

Vermillion

Comcast (formerly Insight)
Full Choice Communications
Galaxy American Communications
Rapid Communications, LLC

Vigo

Avenue Broadband Communications (formerly Interlink)
Cequel III Communications II, LLC
Rapid Communications, LLC
Time Warner Entertainment Company, LP

Wabash

Comcast
Longview Cable and Data, LLC
Mediacom Indiana, LLC

Warren

Comcast (formerly Insight)
Full Choice Communications

Warrick

Avenue Broadband Communications (formerly Charter)
Insight Communications Midwest, LLC
P.C. One Cable
Sigecom, LLC
Time Warner

Washington

Insight Communications Midwest, LLC

Wayne

Comcast (formerly Insight)

Wells

Comcast

Craigville Telephone Company

Mediacom Indiana, LLC

White

Comcast

Whitley

Mediacom Indiana, LLC



Water/Wastewater

2008 WATER / WASTEWATER REPORT

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I. WATER/WASTEWATER OVERVIEW

Industry Structure

Commission Jurisdiction

There are many types of legal entities that provide water and wastewater service to Hoosiers including investor-owned, municipal, not-for-profit, water authority, regional water/sewer districts and conservancy districts.

The legal form of a utility determines whether or not the utility is subject to the Commission’s jurisdiction and the extent of the Commission’s regulation.

The legal form of a utility determines the existence of and the extent of the Indiana Utility Regulatory Commission’s (“Commission”) regulation. The rates and “terms and conditions” of investor-owned water and sewer utilities are regulated by the Commission. Furthermore, municipal water utility rates and water conservancy district rates and territory expansions are regulated by the Commission. However, investor-owned water and sewer utilities with fewer than 300 customers and municipal water utilities, regardless of the number of customers, can remove themselves or “opt out” from the Commission’s jurisdiction.¹ Not-for-profit water and sewer utility rates and “terms and conditions” are regulated by the Commission unless they have opted out. The Commission does not regulate municipal sewer utilities,² nor does it regulate regional water/sewer districts.³

Investor-owned and not-for-profit sewer utilities are required to obtain Certificates of Territorial Authority (CTA) from the Commission, which is Commission authorization to provide utility service in a defined area. Municipal sewer utilities, regional sewer districts and conservancy districts providing sewer service are not required to obtain

¹ See, Ind. Code 8-1-2.7 (not-for-profit, conservancy districts, cooperatives and investor-owned with 300 or fewer customers) and I.C. 8-1.5-3-9 (municipalities). See also, *Ind. Ofc. of Util. Consumer Counselor v. C&M Util., Inc.*, 716 N.E.2d 464 (Ind. App. 1999).

² The exception is the Hammond Sanitary District, which occurred after a dispute developed.

³ In 2005, a law was enacted that provides campgrounds served by regional sewer districts with the ability to appeal to the Commission’s Consumer Affairs Division for an informal review of a disputed matter.

CTAs. Water utilities do not have CTAs and have no service territory regulation, except when the Commission acts to resolve territorial disputes between water utilities.

Thus, the Commission has only partial oversight over the state’s water and wastewater utilities. In fact, the Commission only regulates a small number of all Hoosier water and wastewater utilities, although a large number of consumers are served by those utilities. According to the 2006 IURC Annual Report and data from the Indiana Department of Environmental Management (IDEM), the Commission regulates approximately 125 water utilities out of 835 and 55 wastewater utilities out of 541. Table 1 shows the 10 largest regulated water utilities.

Table 1

10 Largest Regulated Water Utilities Ranked by Number of Customers		
1	Indianapolis Water Company	292,764
2	Indiana American Water Co.	280,600
3	South Bend Municipal Water	82,508
4	Fort Wayne Municipal Water	70,368
5	Evansville Municipal Water Works	59,826
6	Mishawaka Municipal Water	29,667
7	Lafayette Municipal Water Works	26,072
8	Carmel Municipal Water	26,012
9	Schererville Municipal Water	23,329
10	Anderson Municipal Water Works	23,118

The total assets and annual revenues of the Commission-regulated water systems are \$3.2 billion and \$435 million respectively. The total assets and annual revenues for the Commission-regulated wastewater utilities are \$153.8 million and \$24.5 million respectively.

In an effort to improve the Commission’s regulation of water and wastewater utilities, the Commission implemented organizational changes in November 2006 that established a separate Water/Wastewater Division. The new structure allows the Commission staff to provide greater focus on the industries’ issues and to develop specific water and wastewater expertise. In its first full year of operation in 2007, the new Division reviewed 34 filed cases.

Other Regulatory Bodies

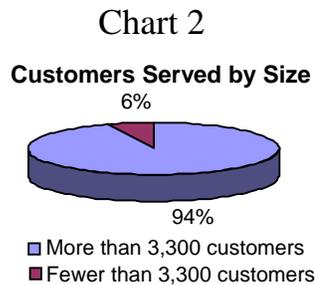
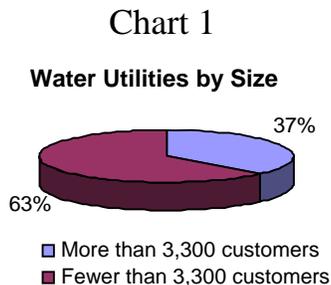
While more state agencies share in their mission of assuring water availability, quality and affordability, there is less federal oversight.

Water and wastewater industries are subject to regulation from IDEM, the Indiana Department of Natural Resources (DNR) and the Indiana State Department of Health (ISDH). IDEM is the state agency responsible for enforcing drinking water and wastewater effluent regulations promulgated by the Environmental Protection Agency (EPA). DNR is the state agency that provides stewardship over water from lakes, rivers, streams and aquifers and is charged with developing the state’s water shortage plan. ISDH regulates wastewater treatment that is provided by a septic system or constructed wetland. The water and wastewater industries are unique from the electric, gas and telecommunications industries in that they are not subject to federal economic regulation.

Industry Characteristics

The drinking water and wastewater sectors are challenged by issues of lack of scale, high capital requirements, fragmentation and a low public profile.

In Indiana, the water and wastewater industries tend to be regional or local in nature with relatively few interconnections between utilities. A large number of small systems serve a small percentage of the population, while a small number of large systems serve the majority of the population. For example, Chart 1 shows that 63% of regulated water utilities serve fewer than 3,300 customers. Chart 2 shows that these utilities only serve 6% of the water utility customer population.



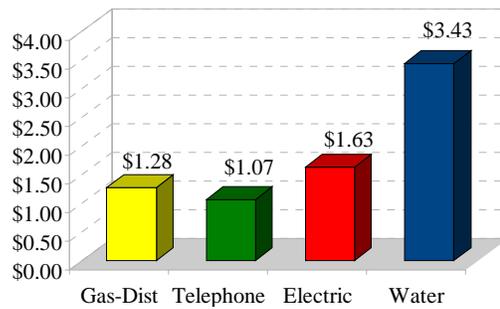
Source: IURC 2006 Annual Reports

Industry Costs

The water sector is the most capital intensive of all utilities, investing more capital per dollar of revenue earned than any other industry.

The industry is also characterized by low variable costs, typically defined as purchased power and chemicals. Costs are increasing for water and wastewater utilities and are driven by the following:

Capital Invested per Dollar of Revenue



Source: 2003 C. A. Turner Utility Reports

- Replacement of aging infrastructure – A significant portion of water and wastewater utility plants has aged to the point where it needs to be replaced. Replacement costs are considerable since material costs have increased significantly and the mains that need to be replaced are often surrounded by existing underground utilities, streets, driveways, etc.
- Compliance with EPA standards such as water quality – Many expenses that utilities incur are tied to maintaining federal drinking water and wastewater effluent requirements. The Safe Drinking Water Act (SDWA) and its amendments, which are enforced by IDEM, require compliance with increasingly stringent standards on a large number of contaminants in drinking water. These new regulations will require significant investments in new technology and result in increased costs.

The water and wastewater industries are not subject to federal economic regulation but are subject to quality regulation through the SDWA.

- Growing demand – While there is movement toward water conservation, Indiana’s growing economy and population will increase the overall demand for water. The need for additional resources to meet increasing customer demands is driving the cost of water supply higher.
- Relocation of facilities for city and state road projects – In September 2005, Governor Daniels introduced his “Major Moves” highway plan. The plan included more than

200 new construction and 200 major preservation highway projects. These highway projects may cause utilities to relocate facilities at a more rapid pace, which will cause utility infrastructure costs to increase when such relocations are not reimbursed.⁴

Within the Commission, several tools allow regulated utilities to lessen the effect of increasing costs. These tools include the Minimum Standard Filing Requirements (MSFRs), Distribution System Improvement Charge (DSIC) and System Development Charge (SDC), which will be discussed later in the report. Other tools need to be developed to reduce the rate effect on customers as utilities continue to make significant investments in infrastructure.

In our 2007 Regulatory Flexibility Report, the Commission suggested the use of purchasing cooperatives as a means to reduce costs. This is where multiple utilities come together to purchase like items such as meters, hydrants, pipe, pumps, motors, booster stations, chemicals and even water storage tanks at a cost savings. After discussing the issue with various parties in the water and wastewater industries, including the American Water Works Association (AWWA), Indiana Rural Water Association (IRWA) and other state commissions, the consensus is that while the idea of a purchasing cooperatives is appealing, the practical aspects are not achievable since many items, such as meters, are different and manufacturers prefer working with individual utilities. For example, the AWWA tried a program called “Efficient Utility Program,” but it was not successful. While purchasing cooperatives may not be the solution, Commission staff is continuing to investigate other means to reduce costs. The Commission is currently working with other government agencies and not-for-profit organizations to encourage utilities to reduce costs through master planning and asset management.

Industry Organizations

There are several water industry organizations with various levels of participation in Indiana. The Indiana Section of the AWWA is the largest and most visible organization. Other organizations include the National Association of Water Companies (NAWC), the

⁴ Utilities are typically reimbursed for utility infrastructure relocations when the infrastructure is located in a utility easement. Utility infrastructure located in a right-of-way will typically be relocated at the utility’s (and therefore the customer’s) expense.

Indiana Rural Water Association (IRWA), the Alliance of Indiana Rural Water, the Indiana Association of Sewer Companies, the Indiana Regional Sewer District Association and the Indiana Water Environment Association. Because the industry does not have a single, unified, state-level organization, communication between stakeholders and industry can be cumbersome. To promote education and effective communications between the Commission and water and wastewater industry organizations, Commission staff made presentations to NAWC, AWWA's annual conference in 2007 and the IRWA conferences in 2007 and 2008.

II. STATE ISSUES

Acquisition and Consolidation

American Water Works, Inc.'s (parent of Indiana-American) recent initial public offering and the City of Fort Wayne's condemnation of a large portion of Utility Center, Inc.'s system are major changes in Indiana's water industry this past year.

Over the last five years, the pace of acquisitions and consolidations by investor-owned utilities has slowed significantly as the most attractive utilities have been acquired. Most of Indiana's largest investor-owned utilities, including Indiana Cities, United Water's Indiana properties, Northwest Indiana Water and several smaller utilities were acquired by Indiana-American in the 1990's. Today, Indiana-American is the state's largest investor-owned water utility, serving approximately 281,000 customers throughout many regions of the state. While the pace of acquisitions may have slowed in recent years, this year has been an active one for investor-owned acquisitions of smaller utilities.

In 2001, RWE Group (RWE), a large holding company based in Germany, acquired American Water Works, Inc. (American Water), the parent company of Indiana-American. In 2005, RWE announced its plan to sell American Water, and in 2007 RWE filed its initial public offering to sell American Water. In a March 2008, filing with the Securities and Exchange Commission, American Water filed its planned initial public offering to total 64 million shares at a maximum price of \$26 per share. On April 22,

2008, the company announced that its initial public offering of 58 million shares was priced at \$21.50 per share and that after the initial offering RWE will continue to own approximately 64 percent of American Water's common stock. On April 23, 2008, American Water began trading on the New York Stock Exchange under the ticker symbol of AWK.

Several municipal acquisitions of private utilities have taken place in recent years. In 2002, the City of Indianapolis acquired the Indianapolis Water Company, and the City of Carmel and the Town of Westfield joined together to acquire Hamilton-Western Utilities, Inc. In 2006, the Town of Winfield acquired an investor-owned sewer utility. Finally, in March 2008, the City of Fort Wayne acquired a large portion of Utility Center Inc.'s system under its power of eminent domain. This action was affirmed by an Indiana Supreme Court decision issued in June 2007.⁵ In its decision, the Supreme Court explained that under Indiana Code § 8-1-2-92 & 93, an investor-owned utility license, permit and franchise is conditioned on the ability of municipalities to purchase utility property. It is not clear how this decision will influence other municipalities. However, the Supreme Court decision appears to clear the way for future acquisitions by condemnation. In fact, the Town of Cedar Lake filed a condemnation action against Utilities, Inc. in April 2008.

Emergency Response

**Some water and wastewater utilities have joined together to form InWARN
– a mutual aid and assistance network in time of emergency.**

A relatively new development for the water and wastewater utility industries is the use of mutual aid and assistance networks. The purpose of these networks is to provide a means by which utilities that have sustained extensive damage from natural or man-made events can obtain emergency assistance in the form of personnel, equipment, materials and other services from other water/wastewater utilities. California pioneered the concept with its California Water/Wastewater Agency Response Network (CalWARN)

⁵ *Utility Center, Inc. d/b/a AquaSource v. City of Fort Wayne*, 868 N.E. 2d 453 (Ind. 2007).

system established in 1992. As a result of events such as 9/11 and Hurricane Katrina, a national effort is now underway for all states to develop similar programs. Indiana's effort is being led by various industry groups active in the state, predominantly the AWWA. The program officially came into existence on August 29, 2007, the second anniversary of Katrina. Called InWARN, this network is expected to have a Web site created and maintained by the Indiana Association of Cities and Towns. The Commission supports the InWARN program and anticipates that utilities under its jurisdiction will participate.

Main Extension Rule

The Commission is studying its Main Extension Rules, since it may no longer be appropriate for the Commission to require utilities to share the cost of main extensions with developers.

Under the current rules, utilities share the cost of main extensions with developers by providing a three-year revenue allowance.⁶ Because utility costs are passed on to ratepayers, this practice requires existing customers to pay at least a portion of the costs for new growth. However, it may no longer be appropriate for utilities to share the costs with developers. First, the water utility industry is the most capital intensive of all utilities and is faced with significant infrastructure costs, which we discuss below. Second, many utilities now charge SDCs. Finally, the revenue allowance can distort the market.

The use of SDCs⁷ supports the notion that "growth should pay for growth". The current Commission rule conflicts with this notion. Where a utility has implemented a SDC and remains in compliance with the current main extension rules, it will pay the developer the three-year revenue allowance amount. Then, it receives payment from the

⁶ The three-year revenue allowance is included in the Commission's main extension rules. The revenue allowance is calculated as three times the estimated annual revenues of a new customer. The utility offsets the revenue allowance amount against the customer's cost to connect to the utility system. Since utility costs are passed on to ratepayers, this practice causes existing customers to pay at least a portion of the costs for new growth.

⁷ A SDC is a fee designed primarily to recover a utility's cost to provide new customers with source of supply, treatment and storage facilities.

developer for its SDC. Elimination of the three-year revenue allowance would allow utilities to reduce the administrative burden and costs associated with administering the rule. SDCs are discussed in greater detail in the Infrastructure Investment portion of the Report.

The revenue allowance also has the unintended effect of distorting the market for serving new subdivisions. In the case of main extensions, two utilities may compete to serve a subdivision built by a developer. Furthermore, a developer is usually concerned about recovering the investment and not the long-term viability of a utility system. If one utility is required to share the cost of the main extension, another utility could react by counter-offering with the same or better offer. However, the first utility may not have the financial resources to make the counter-offer even though it may be in a better position, managerially or technically, to provide service. Thus, in the long-run, customers may be worse off. The main extension rule can raise costs for utilities, thereby eliminating certain firms from competing based solely on whether they can fund the cost of the main extension. The Commission is continuing to study this issue.

Outside-City Customers

Many municipal utilities provide service to customers outside their corporate boundaries, which can create beneficial economies of scale and rate stability to the municipality.⁸ However, many municipalities charge outside-city customers higher rates or a surcharge with premiums ranging from 5% to 50% greater than what is paid by inside-city customers for the same service.

Different rates between customers located inside and outside a municipality may raise questions about whether the non-city rate is cost-justified and non-discriminatory.

A corporate boundary is usually not the same as a natural boundary such as a river or mountain, which may create additional costs to provide service to the other side of the boundary. With corporate boundaries, the imposition of higher rates or a surcharge may

⁸ This can also constrain the proliferation of small developer-owned systems that sometimes become troubled.

seek to stimulate support for annexation or may be simple revenue enhancement. As a result, it may be difficult to support different amounts for inside-city and outside-city water rates, as rates approved by the Commission must be cost-justified and non-discriminatory.

A larger issue occurs for outside-city customers of municipal water utilities that have opted out of the Commission’s jurisdiction. When municipal utilities opt-out of the Commission’s jurisdiction, customer-citizens of that municipality have a voice in how the utility is operated when voting for local leaders. Customers located outside a municipality’s corporate boundaries cannot participate in the local municipal elections and therefore, have no input.

One possible remedy might be to provide the Commission with limited jurisdiction over municipal water rates charged to outside-city customers where a surcharge is assessed, even when the municipality has opted out of the Commission’s jurisdiction. This would be similar to the jurisdiction the Commission has over rates of a conservancy district that serves outside its district boundaries.⁹ It is uncertain whether this will achieve the intended result, as municipalities that provide both water and wastewater services could eliminate the water surcharge and increase the wastewater surcharge to make up the difference. We continue to examine whether outside-city customers of municipalities need to be accorded greater protection than currently exists.

Service Area Disputes

Without specific Commission-defined territories, water utilities engage in robust competition for new areas.

Competition for new territory and customers sometimes leads to service area disputes. Utilities have taken actions such as extending water mains to marginally feasible areas in an effort to discourage another utility from providing service and have installed duplicate infrastructure in areas served by another utility to attract and serve customers. In addition,

⁹ See, I.C. §14-33-20-12.

where a utility provides 100% of a neighboring system's water supply, the utility has the ability to limit the supply provided, or in extreme cases, to completely shut off the water. By limiting the water supply, a provider hopes to gain a competitive advantage to be the sole supplier to future customers.

The Commission does not have the jurisdiction to establish a specific service territory for each water utility, although it does have authority to resolve disputes.¹⁰ Water utilities essentially establish their service territories on a "first-come, first-serve" basis without Commission involvement. This limited Commission involvement does not provide the same orderly development of service territories present in other utility industries. Further study is needed to determine whether or not increased Commission involvement would be beneficial.

Sub-Metering/Sub-Billing

**Due to the passage of I.C. 8-1-2-1.2, the Commission has
ended its investigation of sub-metering/sub-billing.**

Sub-metering and sub-billing is a practice usually engaged in by multi-unit housing complexes or mobile home parks, in which tenants or residents are billed directly for utility services. Many of the entities that elect to sub-meter or sub-bill hire a billing agent to install meters and perform monthly billing and administrative functions including disconnection of customers, charging late fees, disconnection and reconnection fees, monthly service charges and bad check fees. While sub-metering encourages customers to conserve water since it is no longer provided "free", the practice has created several concerns for the Commission in the past. Complaints received by the Commission and the Office of Utility Consumer Counselor (OUCC) include claims of excessive fees, high rates, unrealistic usage, disconnection issues and eviction for non-payment of landlord-assessed utility fees. A December 2000 Journal of the AWWA article titled "Rapid Growth in Sub-metering Produces Benefits and Problems" indicated:

¹⁰ See, I.C. 8-1-2-86.5.

Unfortunately, because this is an evolving industry, there is currently no uniform set of national standards or guidelines for third-party sub-metering or allocation programs and many issues need to be considered. Some of the important ones are meter standards, reading and billing protocols, the fairness of allocation programs, tenant service charges, tenant appeals process, customer service standards, late fees and termination of service standards, and water quality.

In April 2007, the Commission initiated a broad investigation into the practices of sub-metering and sub-billing of water and sewer service. On March 21, 2008, Indiana Code § 8-1-2-1.2 was signed into law. This new statutory section specifies that a landlord is not a public utility subject to Commission jurisdiction if the landlord complies with the criteria set forth when billing separately for water or sewage service. The statute also includes a provision to permit tenants to file a complaint with the Commission if a violation of the standards is alleged. As a result, the Commission issued an order on April 23, 2008 dismissing its investigation and initiating a rulemaking so that the Commission may carry out its new responsibilities.

Troubled Water/Wastewater Utilities

Certain water and wastewater utilities are classified by the Commission as “troubled”. To determine whether or not a utility is “troubled,” the Commission examines technical, financial, and managerial capacity; the physical condition and capacity of the plant; the utility’s compliance with state and federal law or the Commission’s orders; and provision of service to customers. If the utility has additional violations, after the Commission orders it to remedy the deficiencies, the Commission can order the acquisition of a new owner or appoint a receiver to operate the utility.

The utilities that end up as “troubled” are typically small (30 to 300 customers) and often are developer-owned water or wastewater utilities, which may be turned over to residents once the developer’s objectives of facilitating the sale of residential real estate have been met. Over time, many of these utilities deteriorate and create customer service or environmental problems. A continuing area of concern is the ability of these very

small investor-owned utilities (fewer than 300 hundred customers) to withdraw from the Commission’s jurisdiction.¹¹ Once this withdrawal occurs, the Commission no longer has the ability to proactively monitor the progress and development of the systems that are historically most likely to become troubled.

**Investor-owned water and wastewater utilities with less than 300 customers
can withdraw from the Commission’s jurisdiction, preventing the Commission from
regulating the very entities that are most likely to become “troubled”.**

Dealing with “troubled utilities” consumes a great deal of state agency resources, as the Commission, OUCC and IDEM work together to resolve the problems. The preferred methods of resolution are correction of the utility’s deficiencies, connection to an existing utility and/or identifying another utility to operate or buy the utility. As noted earlier, the Commission may appoint a receiver to operate the utility and arrange a sale of the utility assets as a result of a utility’s failure to correct its deficiencies.¹² The receivership process is often protracted and costly with the costs ultimately paid by the utility’s customers. Supervision of a receiver and monitoring of the costs incurred requires reallocation of the Commission’s resources for ongoing cases since legal issues within the receivership can complicate the process of identifying a new owner. Notwithstanding these concerns, the Commission’s ability to appoint a receiver and order utilities to remedy deficiencies are useful tools to achieve utility compliance.

The Commission has continued to deal with the acquisitions of troubled utilities. During 2006 and 2007, Green Acres Utilities, Inc. (Green Acres) experienced severe operational deficiencies resulting in a court injunction that in part required the utility to be sold. The Commission worked closely with IDEM throughout this process and within one year from the issuance of the injunction, the Commission issued its order approving the sale and transfer of the Green Acres system.

The Commission’s primary goal, however, is to prevent a utility from becoming troubled. The Commission and IDEM each have rules regarding the ability and operation

¹¹ See, Indiana Code § 8-1-2.7.

¹² See, Indiana Code § 8-1-30.

of water and wastewater utilities. IDEM's New Public Water System Capacity review requires a new public water supply system commencing operation after October 1, 1999 to demonstrate its technical, managerial and operational abilities to serve.¹³ Commission staff participates in this review process, and the Commission has similar requirements for a start-up sewer utility.¹⁴ Once a utility obtains approval to commence operations, the Commission's Water/Sewer Division (Division) takes proactive measures to initiate contact with utilities that report operational or financial concerns in their annual report filings.

The Commission is aware that small utilities have limited resources and a reduced ability to attract and retain high quality staff. Thus, the Division is developing a "tool kit" that will contain resource information to assist these utilities and also plans to host a workshop in 2008 that will focus on educating utility management about free resources available at the federal, state and local levels. In addition, the Commission would like to expand the availability of the Small Utility Rate Application process to utilities with fewer than 10,000 customers. This process is a statutorily authorized process where utilities with fewer than 5,000 customers can file rate increase requests without the use of an attorney or an accountant.¹⁵ The Commission believes that small utilities with limited resources may be reluctant to file rate increase requests because of the professional fees involved. By increasing the availability of the Small Utility Rate Application process, the Commission is hopeful that more utilities will request rate increases before their financial situations deteriorate to the point where the utility becomes troubled.

Even taking into account the Commission's efforts to assist small utilities, the proliferation of small developer-owned utilities must still be addressed. Small water and wastewater utility start-ups are challenging, given high fixed costs, lack of financial resources and relatively few customers over whom to spread costs. The development of more stringent requirements for new utilities, as well as increased utilization of existing

¹³ See, 327 I.A.C. 8-3.6, Demonstration of New Public Water Supply System Capacity.

¹⁴ See, 170 I.A.C. 8.5-3-1, Application for certificate of territorial authority.

¹⁵ The process bypasses an evidentiary hearing unless the Commission or OUCC determine there is a need or if ten or more customers request a hearing.

utilities to serve new developments, are two approaches that should be used to reduce the proliferation of small, developer-owned and developer-initiated systems.

Fining Authority

Utilities of all sizes are capable of failing to perform at satisfactory levels. When this happens, the Commission is limited in its ability to address the issue. As previously discussed, the Commission has been given authority to appoint a receiver and direct the sale of utility assets for a utility's failure to remedy its deficiencies under I.C. § 8-1-30. Except for this action, however, the Commission has limited authority to change a utility's behavior.

The ability of the Commission to fine these utilities would provide a more measured approach. Fining authority would provide the Commission with more flexibility in resolving issues regarding troubled or underperforming utilities, short of draconian measures.

Water Supply Issues

While frequently a topic in the arid Southwest, and even recently in the Southeast, water supply issues have seldom been of concern to the relatively water-rich Midwest. The water supply in Indiana has generally been plentiful, but over the past few years, water rights and access issues have arisen in Indiana. Indiana has not always been able to economically access the amount of water needed – even in areas that typically have plenty of water go through periods of drought. As recently as the late summer and early fall of 2007, the National Oceanic and Atmospheric Administration (NOAA) U.S. Drought Monitor classified 74% of Indiana as “abnormally dry,” with 62% experiencing “moderate drought” and 41% experiencing “severe drought.” Consequently, issues of adequacy and reliability of the water supply are often only one season's weather away.

Regional and Local Issues

The issue of matching water supply with demand is impacted by the Great Lakes Water Resources Compact (“Compact”). This Compact, involving all of the Great Lakes States and Canadian Provinces, controls who can use Great Lakes water and how much.

It prohibits the diversion of water from the Great Lakes watershed to another region without the consent of all state and provincial leaders. This effectively restricts the delivery of Lake Michigan water to a small portion of the state.

A new demand placed on Indiana's water supply is the operation of ethanol plants that require large amounts of water. Ethanol plants require approximately 300 to 400 million gallons of water to produce 100 million gallons of ethanol. Thus, ethanol plants represent a new force competing for water resources and may hasten the need to identify categories of water users to determine allocation in the event of a water shortage.

Specific examples of water issues include the City of Indianapolis' Department of Waterworks and AquaVisions, LLC that began work on a "project to address drought tolerance and alternate water supply." The project proposed construction of a pipeline from Lake Monroe to Indianapolis and was met with resistance from various groups. In addition, on August 22, 2007, the City of Greensburg and the Decatur County Rural Water Company (DCRW) filed a Joint Petition asking the Commission to approve an agreement by the parties, which resolved a territorial dispute by establishing service area boundaries and increasing the long-term water supply for DCRW. The agreement was approved by the Commission on January 4, 2008.

Demand and Consumption

The demand for water comes from a variety of activities. The generic term for water demand is *withdrawal*, defined as the physical removal of water from its ground or surface use.¹⁶ The state of Indiana divides significant water withdrawal (each facility having the capability of withdrawing greater than 100,000 gallons per day) into six categories: energy production (power generation, coal preparation and heating and cooling); industrial (manufacturing process, and sand and gravel operations); agriculture (irrigation, golf courses and field drainage); public supply (water supply utilities, mobile home parks, apartment complexes and schools); rural use (livestock watering and fish

¹⁶ Indiana's Water Shortage Plan, May 2000.

hatcheries); and miscellaneous (construction dewatering, snow-making, fish and wildlife areas, and lake-level maintenance).¹⁷

Withdrawal includes consumptive and non-consumptive uses. According to Indiana’s Water Shortage Plan, consumptive uses are “those that, because of evaporation, transfer out of the basin of origin, incorporation into manufactured products or other processes, preclude the return of some or all of the withdrawn water to its source. Non-consumptive uses are those in which the withdrawn water is returned to the supply system undiminished in volume.”¹⁸ The Great Lakes Commission defines consumptive use as “that portion of water withdrawn or withheld from the Great Lakes Basin and assumed to be lost or otherwise not returned to the Great Lakes Basin due to evapotranspiration (use of water by a given crop), incorporation into products or other processes.”¹⁹

A study of consumptive and non-consumptive use was done by the Great Lakes Commission in 2003. Measurement of consumptive use is not an exact science; simple measurements of the water entering and leaving a particular facility may not properly measure consumptive use if the product (e.g., bottled beverages) leaves the state. Moreover, agricultural crops and livestock that leave the state may be considered consumptive use.²⁰ Furthermore, the percentage for Fossil Fuel Power Plants in the Great Lakes Commission study does not include evaporation. Data showed that consumptive use in Indiana varied depending on the type of withdrawal, as shown in the table below.

Percentage of Consumptive Use by Total Water Use in Indiana

Public Supply	Self-Supply Domestic	Self-Supply Irrigation	Self-Supply Livestock	Self-Supply Industrial	Self-Supply Fossil Fuel Power Plants
15%	10-15%	90%	80%	6%	2%

¹⁷ Under the Water Resources Management Act (I.C. 14-25-7), the Division of Water of DNR reports on water uses in Indiana. The latest report gathers data from 1986-2006.

¹⁸ Indiana’s Water Shortage Plan, May 2000.

¹⁹ Measuring and Estimating Consumptive Use of the Great Lakes Water, Great Lakes Commission, 2003.

²⁰ Recent literature has coined the phrase “virtual water,” which means the exportation of water through crops.

While statewide water shortages do not exist, the Commission is taking steps to ensure responsible water use and is monitoring utilities with high water loss.

As part of the Commission's obligation to ensure adequate and reliable utility service, the Commission has a direct interest in water supply assurance and in the responsible use of water. While DNR has been assigned the task of developing the state's water shortage plan, Commission staff members participate in the development of this plan. The Commission's promotion of wise use and water system efficiency includes distribution system improvements, leak detection and remediation programs, demand management and integrated water resources planning, conservation, rate design alternatives, and communication and education.

In a specific effort to address water supply issues, the Water/Sewer Division staff compared the amount pumped or purchased by a utility to the amount of water sold to its customers. As a result, in March 2008, twenty-seven letters were mailed to water utilities that reported water loss of 25% or greater. The letter included a Web link to AWWA's free water audit program that helps utilities quantify and track water loss and identify areas for improved efficiencies.

III. INFRASTRUCTURE INVESTMENT

The Indiana Advisory Commission on Intergovernmental Relations' report titled "Financial Needs for Wastewater and Water Infrastructure in Indiana" (January 2003) estimates that the statewide wastewater and drinking water infrastructure needs from the year 2000 to 2020 will necessitate expenditures of at least \$12.4 to \$13.9 billion. Some expenditures include: correction of combined sewer overflows, wastewater conveyance and treatment, remediation of failing septic systems, storm water conveyance and management, drinking water production, and treatment and distribution facilities. Annual investments made by governmental entities between January 1990 and March 2002 were approximately \$253 million, which is far short of the approximate \$658 million investment needed annually to meet the needs identified in this report. Many large

Indiana utilities are addressing infrastructure needs, as reflected in capital improvement plans submitted in recent proceedings before the Commission. However, many smaller systems lack the expertise to complete such a plan; most plans submitted to the Commission are essentially a list of projects the utility hopes to achieve in the near future, rather than true capital improvement plans.

A true capital improvement plan is typically developed after the utility has completed a 20-year master planning study that identifies operational and managerial issues and develops goals to address these issues. Without a capital improvement plan, it is less likely that a utility will replace and improve its infrastructure in the most efficient manner. If a utility without a capital improvement plan spends money on capital improvements at all, it will likely do so in reaction to crisis and new growth. Such an approach may compromise customer service and ultimately produce higher rates for customers. The Commission plans to use its position to encourage jurisdictional utilities to complete these studies.

Regulatory Incentives to Invest

To recover infrastructure investment, the Commission has approved Extensions and Replacements, System Development Charges (SDCs), Distribution System Improvement Charges (DSICs) and the Minimum Standard Filing Requirements (MSFRs).

Extensions and Replacements

Currently, utilities regulated by the Commission have mechanisms to recover the costs of infrastructure investment. Municipal and not-for-profit utilities are allowed to include such costs, typically referred to as extensions and replacements, in customer rates. This allows utilities to include future infrastructure projects in rates without relying entirely on debt.

System Development Charge (SDCs)

As utilities search for new ways to finance infrastructure investments and minimize the effect on existing customers, some utilities have requested Commission approval to

establish SDCs. SDCs are utility fees paid by property owners who connect their properties to the utility's system for the first time. These fees are primarily meant to recover a utility's cost to provide new customers with source of supply, treatment and storage facilities; SDCs can be more than \$1,400 for water connections, and \$3,000 for wastewater connections. The use of SDCs supports the notion that "growth should pay for growth" and reduces the likelihood that existing customers will pay for construction of new facilities.

Distribution System Improvement Charge (DSICs)

In 2000, Indiana was the second state in the nation to approve a capital recovery mechanism, called the Distribution System Improvement Charge (DSICs). DSICs allow an investor-owned water utility to increase its rates to recover the costs of improvements to its distribution system without a rate case. DSICs only apply to water utilities, and the Commission believes that making the DSIC mechanism available to wastewater utilities would encourage infrastructure investments.

Post-in-Service AFUDC and Deferred Depreciation

Investor-owned utilities also benefit from the Commission's treatment of post-in-service allowance for funds used during construction and deferred depreciation. If approved by the Commission, this allowance defers the capital costs and depreciation expense of a project to the utility's next rate case. This practice helps to minimize the utility's earnings erosion until the next rate case when the plant improvement is included in the utility's rate base.

Minimum Standard Filing Requirements

The Commission also has a rule in place referred to as the Minimum Standard Filing Requirements (MSFRs). The MSFR process allows a utility to update its rate base for capital investments incurred up until the final hearing. This can be an incentive to invest in capital improvements as the utility does not need to wait until a later rate case to earn a return on capital investments. With utility participation, the Commission is completing a revision to the MSFR rules this year. When this revision is completed, it is expected to lessen the regulatory burden of participation in the MSFR.

Funding Programs

There are many federal and state funding options available for infrastructure investment. Grants from the EPA are leveraged in bond markets to generate State Revolving Loan Fund (SRF) loan proceeds. The Indiana Finance Authority administers these funds through low-interest loans at 20-year terms to investor-owned, municipal and not-for-profit utilities. Rural Development Loans and Grants are available to rural areas and towns serving a population of fewer than 10,000. Extended 40-year terms are available at market or below-market interest rates, depending on community demographics. Grants for planning and up to 75% of project costs are available. Planning and construction grants are available to non-entitlement cities, towns or counties through the Community Focus Fund that is administered through the Indiana Office of Community and Rural Affairs.

Loans and grants are available for utility infrastructure investment through the State Revolving Fund, Rural Development Loans and Grants and the Community Focus Fund.

While there are additional grants and loan programs offered by state and federal governments to municipal or not-for-profit utilities, the SRF program is most commonly used by small, water and wastewater utilities as the funding source for their projects.

Economic Development

Water availability and proper sewage disposal are important contributors to economic development. Economic development typically entails construction of new facilities. Nearly every building that is constructed needs water and/or wastewater service. In some manufacturing applications, reliability and quality are critical factors. The cost of water and wastewater infrastructure can be millions of dollars, which most utilities do not have and would not want their existing ratepayers to pay. Extending utility infrastructure may prove unfeasible if a utility is required to invest significant funds to serve a prospective business, when business is unwilling to reimburse the utility. The lack of water and/or wastewater service in some areas of the state can hinder economic development.

IV. FEDERAL ISSUES

Quality Regulation – SDWA

While the Commission does not regulate water quality, some of the expenses a utility incurs are tied to maintaining drinking water and wastewater effluent that meets federal standards. Water and wastewater industries are subject to federal regulation primarily through the Safe Drinking Water Act (SDWA) that was passed in 1974 and amended in 1986. The EPA is the lead federal agency to implement the SDWA and is mandated to set standards for drinking water. The standards, which are set by the EPA and enforced by IDEM, are health-related, focusing on inorganic and organic chemicals, microorganisms and aesthetic (taste, odor and appearance). These standards are developed by setting a maximum contaminant level and maximum contaminant level goal, both of which are periodically updated.

For example, in 2005 the EPA updated its rules on disinfectants, such as chlorine, which create harmful by-products when combined with naturally-occurring materials in water.²¹ This new rule is forcing utilities to find new, more costly ways to disinfect water.

General Lack of Economic Regulation

The water and wastewater industries are unique from the electric, gas and telecommunications industries in that they are not subject to federal economic regulation. Economic regulation of water and sewer industries has been left to the individual states since, unlike other utility industries, transmission and distribution lines typically do not cross state boundaries. The reduced level of federal economic regulation may explain why water and sewer industry issues have not received the attention at the national level that other industries have. Federal regulation of other industries has provided greater impetus for industry-wide “best practices,” economic and technical research, and has led to greater uniformity in practices.

²¹ States have primary enforcement responsibility if they adopt regulations as strict as the national standards, adopt authority for administrative penalties, develop adequate procedures for enforcement, maintain records and create a plan for providing emergency water supplies. The Indiana Department of Environmental Management (IDEM) is the state agency responsible for enforcing drinking water and wastewater effluent regulations promulgated by the EPA. To the extent that wastewater treatment is provided by a septic system or constructed wetland, the Indiana State Department of Health (ISDH) is the jurisdictional agency.

V. APPENDICES

Appendix A – Water Utility Revenues

Water Utility Revenues Year Ended December 31, 2006

<u>Utility Name</u>	<u>*Revenues</u>	<u>Percentage of Total Revenues</u>
Indiana-American Water Company, Inc.	\$136,914,895	31.47%
Indianapolis Water	95,216,677	21.89%
Fort Wayne Municipal Water Utility	25,849,920	5.94%
South Bend Municipal Water	13,794,016	3.17%
Evansville Municipal Water Works Dept.	13,020,982	2.99%
Bloomington Municipal Water	9,911,197	2.28%
Mishawaka Municipal Utilities	8,995,223	2.07%
Lafayette Municipal Water Works	7,971,566	1.83%
Carmel Municipal Water Utility	6,740,316	1.55%
Michigan City Municipal Water Works	6,513,290	1.50%
Elkhart Municipal Water Works	5,954,877	1.37%
Anderson Municipal Water Works	5,762,866	1.32%
Utility Center, Inc.	5,663,972	1.30%
Schererville Municipal Water Works	5,550,516	1.28%
Columbus Municipal Water Utility	4,661,374	1.07%
Marion Municipal Water Works	4,606,900	1.06%
Bargersville Municipal Water Utility	3,988,203	0.92%
Stucker Fork Conservancy District	2,883,327	0.66%
Chandler Municipal Water Works	2,622,771	0.60%
Highland Municipal Water Utility	2,476,784	0.57%
Ramsey Water Company, Inc.	2,448,916	0.56%
Brown County Water Utility, Inc.	2,442,189	0.56%
Jackson County Water Utility, Inc.	2,340,823	0.54%
Auburn Municipal Water Utility	2,209,864	0.51%
New Castle Municipal Water Works	2,052,866	0.47%
Silver Creek Water Corporation	1,999,808	0.46%
Harbour Water Corporation	1,959,422	0.45%
Eastern Heights Utilities, Inc.	1,909,830	0.44%
Salem Municipal Water Works	1,882,537	0.43%
North Lawrence Water Authority	1,877,437	0.43%
Edwardsville Water Corporation	1,581,336	0.36%
Mishawaka-Clay Municipal Utilities	1,560,557	0.36%
Princeton Municipal Water	1,514,811	0.35%
Eastern Bartholomew Water Corporation	1,501,013	0.35%
German Township Water District, Inc.	1,407,437	0.32%
South Harrison Water Corporation	1,398,847	0.32%
Peru Municipal Water Dept.	1,372,899	0.32%
Morgan County Rural Water Corporation	1,372,358	0.32%

**Data taken from 2006 Annual Reports filed with the Commission*

Utility Name	*Revenues	Percentage of Total Revenues
Boonville Municipal Water Works	1,355,269	0.31%
IWC Morgan Water Corporation	1,296,902	0.30%
East Lawrence Water Authority	1,290,753	0.30%
Columbia City Municipal Water Utility	1,264,479	0.29%
Pike-Gibson Water, Inc.	1,262,931	0.29%
Watson Rural Water Co., Inc.	1,164,102	0.27%
Tri-Township Water Corporation	1,122,447	0.26%
Ellettsville Municipal Water Utility	1,107,050	0.25%
Southwestern Bartholomew Water Corporation	1,103,683	0.25%
South Lawrence Utilities, Inc.	1,088,022	0.25%
Martinsville Municipal Water Utility	1,080,097	0.25%
Corydon Municipal Water Works	1,050,132	0.24%
Gibson Water, Inc.	1,004,482	0.23%
Southern Monroe Water Corporation	865,093	0.20%
Sellersburg Municipal Water	848,265	0.19%
Aurora Municipal Water Utility	843,673	0.19%
Twin Lakes Utilities, Inc.	800,640	0.18%
Prince's Lake Municipal Water Dept.	748,630	0.17%
Floyds Knobs Water Company, Inc.	740,142	0.17%
North Dearborn Water Corporation	707,380	0.16%
Van Buren Water, Inc.	661,648	0.15%
Reelsville Water Authority	591,974	0.14%
Petersburg Municipal Water Works	587,754	0.14%
Valley Rural Utility Company	575,156	0.13%
LMS Townships Conservancy District	563,976	0.13%
St. Henry Water Corporation	550,529	0.13%
Charlestown Municipal Water Dept.	538,446	0.12%
Fortville Municipal Water Works	519,314	0.12%
Washington Township Water Corp. Monroe County	516,624	0.12%
Marysville Otisco Nabb Water Corporation	504,962	0.12%
Clinton Township Water Company	483,453	0.11%
B & B Water Project, Inc.	458,690	0.11%
Lawrenceburg Municipal Utilities	458,100	0.11%
Indiana Water Service, Inc.	434,574	0.10%
Cataract Lake Water Corporation	390,310	0.09%
Riverside Water Company, Inc.	338,694	0.08%
St. Anthony Water Utilities, Inc.	316,891	0.07%
Eaton Municipal Water Utility	281,209	0.06%
Fayette Township Water Association, Inc.	259,162	0.06%
Knightstown Municipal Water Utility	246,360	0.06%
Painted Hills Utilities Corporation	218,259	0.05%
Kingsford Heights Municipal Water Utility	203,978	0.05%
Everton Water Corporation	199,789	0.05%
Utilities, Inc.	193,332	0.04%
Ogden Dunes Municipal Water	192,325	0.04%

**Data taken from 2006 Annual Reports filed with the Commission*

Utility Name	*Revenues	Percentage of Total Revenues
Kingsbury Utility Corporation	174,357	0.04%
Mapleturn Utilities, Inc.	172,835	0.04%
Consumers Indiana Water Company	170,291	0.04%
Troy Municipal Water Dept.	167,649	0.04%
Pioneer Water, LLC	167,580	0.04%
Battle Ground Conservancy District	146,030	0.03%
South 43 Water Association, Inc.	140,431	0.03%
Oak Park Conservancy District	121,740	0.03%
Darlington Waterworks Company	99,966	0.02%
Perry Water System, Inc.	99,596	0.02%
Water Service Company of Indiana, Inc.	81,219	0.02%
Fillmore Municipal Water	76,305	0.02%
Hillsdale Water Corporation	69,757	0.02%
Wedgewood Park Water Co., Inc.	62,271	0.01%
Apple Valley Utilities, Inc.	60,961	0.01%
Rhorer Harrel & Schacht Roads Water Corp.	60,638	0.01%
Pleasantview Utilities, Inc.	55,914	0.01%
American Suburban Utilities, Inc.	33,369	0.01%
J.B. Waterworks, Inc.	30,736	0.01%
Sugar Creek Utility Company, Inc.	22,714	0.01%
Fairview Park Municipal Water	17,426	0.00%
River's Edge Utility, Inc.	15,623	0.00%
Wells Homeowners Association, Inc.	11,821	0.00%
Shady Side Drive Water Corporation	10,431	0.00%
Liberty Water Corporation	10,030	0.00%
Hessen Utilities, Inc.	8,094	0.00%
Pence Water Works	6,030	0.00%
Country Acres Property Owners Association	3,024	0.00%
	\$435,059,141	100.00%

**Data taken from 2006 Annual Reports filed with the Commission*

Appendix B – Wastewater Utility Revenues

Wastewater Utility Revenues Year Ended December 31, 2006

Utility Name	*Revenues	Percentage of Total Revenues
Hamilton Southeastern Utilities, Inc.	\$7,698,316	31.38%
Utility Center, Inc.	4,563,205	18.60%
South Haven Sewer Works, Inc.	3,243,685	13.22%
American Suburban Utilities, Inc.	2,257,941	9.20%
Twin Lakes Utilities, Inc.	1,520,836	6.20%
Eastern Richland Sewer Corporation	1,042,749	4.25%
Valley Rural Utility Company	851,134	3.47%
Driftwood Utilities, Inc.	430,202	1.75%
Indiana-American Water Company, Inc.	320,110	1.30%
Wymberley Sanitary Works, Inc.	279,040	1.14%
Mapleturn Utilities, Inc.	272,173	1.11%
Apple Valley Utilities, Inc.	206,219	0.84%
Consumers Indiana Water Company	206,028	0.84%
Doe Creek Sewer Utility, Inc.	183,430	0.75%
Water Service Company of Indiana, Inc.	164,310	0.67%
Kingsbury Utility Corporation	152,817	0.62%
Northern Richland Sewer Corporation	148,408	0.60%
Eastern Hendricks County Utility, Inc.	130,959	0.53%
Thralls Station, Inc.	101,004	0.41%
Sani Tech, Inc.	91,875	0.37%
Green Acres Sanitation Co., Inc.	86,175	0.35%
Sugar Creek Utility Company, Inc.	68,143	0.28%
Southeastern Utilities, Inc.	63,999	0.26%
Old State Utility Corporation	63,387	0.26%
Pleasantview Utilities, Inc.	46,184	0.19%
Wildwood Shores Utility Corp., Inc.	44,179	0.18%
Heir Industries, Inc.	39,736	0.16%
Galena Wastewater Treatment Plant	37,890	0.15%
Hardin Monroe, Inc.	29,717	0.12%
Devon Woods Utilities, Inc.	28,169	0.11%
East Shore Corp.	25,725	0.10%
Hillview Estates Subdivision, Inc.	25,684	0.10%
South County Utilities, Inc.	21,522	0.09%
JLB Development, Inc.	20,904	0.09%
Chimneywood Sewage Works, Inc.	20,005	0.08%
Country Acres Property Owners Association	14,496	0.06%
River's Edge Utility, Inc.	13,139	0.05%
C & M Utility, Inc.	11,355	0.05%
Hessen Utilities, Inc.	5,195	0.02%
Brushy Hollow Utilities, Inc.	3,421	0.01%
Webster Development, LLC	1,240	0.01%
	\$24,534,706	100.00%

**Data taken from 2006 Annual Reports filed with the Commission*

Appendix C – Residential Water Bill Comparison

RESIDENTIAL WATER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 AT 5,000 GALLONS OR 668 CUBIC FEET		
Rank	Utility Name	2008
1	Sullivan-Vigo	\$67.20
2	Brown County	\$55.83
3	Fillmore	\$52.66
4	Morgan County Rural, Western Exp.	\$51.94
5	American Suburban	\$51.78
6	German Township, Marrs Division	\$50.46
7	South Lawrence	\$46.45
8	North Lawrence	\$45.80
9	Marion Heights	\$43.79
10	Indiana American: Burns Harbor, Chesterton, Gary, Porter, South Haven***	\$42.94
11	Morgan County Rural	\$42.20
12	Indiana American: Hobart*	\$42.15
13	Indiana American: Portage*	\$42.10
14	Indiana American: Merrillville***	\$41.55
15	German Township Stewartsville	\$38.71
16	St. Anthony	\$37.95
17	Valparaiso Lakes*	\$37.69
18	Jackson County	\$36.37
19	South Harrison	\$36.23
20	Pioneer	\$35.00
21	East Lawrence Water	\$34.90
22	Indiana American: Kokomo*	\$34.41
23	Edwardsville Water	\$34.02
24	Indiana American: Noblesville*	\$33.75
25	Everton	\$33.70
26	Clinton Township	\$33.16
27	Southwestern Bartholomew	\$32.73
28	Gibson Water	\$32.08
29	Washington Twp. Of Monroe	\$31.86
30	Posey Township	\$31.55

* Fire protection surcharge for a 5/8" meter is included

** Fire protection charge for a 5/8" meter is included in the base charge

*** Application of the \$3.21 per month fire protection surcharge depends upon customer location

RESIDENTIAL WATER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 AT 5,000 GALLONS OR 668 CUBIC FEET		
Rank	Utility Name	2008
31	Reelsville	\$31.15
32	Indiana American: Seymour, Somerset, Summitville	\$31.11
33	Utilities, Inc.	\$31.03
34	Perry	\$30.60
35	Cataract Lake Water Corporation	\$30.30
36	Richmond, Wabash Valley*	\$30.12
37	Pipe Creek	\$30.00
38	Indiana American: Johnson County - Greenwood, So. Indiana (Jeffersonville, New Albany), Newburgh*	\$29.97
39	Indiana American: Mooresville	\$29.58
40	Indiana American: Crawfordsville*	\$29.51
41	Indiana American: Winchester, suburban surcharge*	\$29.46
42	Pike-Gibson	\$28.33
43	North Dearborn	\$28.33
44	Bluffs Basin	\$28.15
45	Painted Hills	\$27.75
46	Fayette Township	\$27.40
47	Indiana American: Muncie, Johnson Co. - Franklin, Shelbyville, Clarksville, Summitville	\$27.33
48	Indiana American: Wabash*	\$27.32
49	Pleasant View	\$27.25
50	Chandler, Town*	\$27.21
51	Marion*	\$27.02
52	Boonville*	\$26.89
53	Fortville, outside	\$26.82
54	Hillsdale Water	\$26.65
55	Indiana American: Winchester	\$26.64
56	Waldron	\$25.98
57	Mishawaka, Clay	\$25.50
58	Consumers Indiana, Lake County Indiana	\$25.44
59	Indiana American: Warsaw*	\$25.22
60	Pence	\$25.00

* Fire protection surcharge for a 5/8" meter is included

** Fire protection charge for a 5/8" meter is included in the base charge

*** Application of the \$3.21 per month fire protection surcharge depends upon customer location

RESIDENTIAL WATER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 AT 5,000 GALLONS OR 668 CUBIC FEET		
Rank	Utility Name	2008
61	Eaton	\$25.00
62	B&B Water Project	\$24.84
63	Battleground	\$24.70
64	Stucker Fork, Austin	\$24.45
65	St. Henry	\$24.20
66	Valley Rural	\$24.16
67	Bargersville, with in ground sprinklers	\$24.13
68	Southern Monroe	\$23.98
69	Cordry Sweetwater - mostly outside of jurisdiction	\$23.93
70	Columbia City*	\$23.70
71	Kingsford Heights	\$23.46
72	Van Bibber Lake	\$23.40
73	Wedgewood Park	\$23.26
74	Floyds Knobs	\$23.15
75	Ramsey	\$23.10
76	Salem	\$22.99
77	River's Edge	\$22.55
78	Princeton	\$22.45
79	Prince's Lakes	\$22.40
80	Auburn*	\$22.31
81	Van Buren Water	\$22.25
82	Water Service Co. of IN	\$22.24
83	Mapleturn	\$22.15
84	West Lafayette, suburban surcharge*	\$22.14
85	German Township	\$22.10
86	Shady Side Drive	\$21.96
87	Indiana American: Flowing Wells*	\$21.91
88	Eastern Bartholomew	\$21.67
89	Eastern Heights	\$21.59
90	Schererville*	\$21.16

* Fire protection surcharge for a 5/8" meter is included

** Fire protection charge for a 5/8" meter is included in the base charge

*** Application of the \$3.21 per month fire protection surcharge depends upon customer location

RESIDENTIAL WATER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 AT 5,000 GALLONS OR 668 CUBIC FEET		
Rank	Utility Name	2008
91	Martinsville, Morgan-Monroe Forest*	\$21.12
92	Apple Valley	\$21.02
93	Michigan City*	\$20.92
94	Sugar Creek	\$20.70
95	Oak Park	\$20.67
96	Silver Creek	\$20.60
97	Knightstown*	\$20.47
98	Indianapolis, City of	\$20.37
99	Ellettsville, outside town*	\$20.27
100	Ogden Dunes	\$20.03
101	Rhorer, Harrell & Schacht	\$19.86
102	Tri-Township	\$19.85
103	Fort Wayne, outside City	\$19.83
104	Indiana American: West Lafayette	\$19.52
105	LMS Townships	\$18.94
106	Riverside	\$18.87
107	Marysville-Otisco-Nabb	\$18.65
108	Peru, inside Corporate limits*	\$18.57
109	Watson Rural	\$18.55
110	Aurora, outside city	\$18.50
111	Bargersville	\$18.36
112	Charlestown	\$18.30
113	J.B. Waterworks	\$18.26
114	Fortville, inside	\$17.90
115	Twin Lakes	\$17.90
116	Utility Center	\$17.82
117	Kingsbury	\$17.55
118	Troy, Ridge Road	\$17.48
119	South 43	\$17.40
120	Fort Wayne, inside City	\$17.26

* Fire protection surcharge for a 5/8" meter is included

** Fire protection charge for a 5/8" meter is included in the base charge

*** Application of the \$3.21 per month fire protection surcharge depends upon customer location

RESIDENTIAL WATER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 AT 5,000 GALLONS OR 668 CUBIC FEET		
Rank	Utility Name	2008
121	Anderson Municipal	\$17.14
122	Corydon*	\$16.90
123	Fairview Park	\$16.70
124	Carmel	\$16.20
125	Peru, outside Corporate limits	\$16.20
126	Bloomington, outside city*	\$15.96
127	Ellettsville, inside*	\$15.89
128	Aurora, inside city	\$15.50
129	Indiana Water Service, Inc.	\$15.28
130	Bloomington, inside city*	\$15.20
131	Mishawaka, City*	\$15.14
132	New Castle	\$15.12
133	Troy, Non-Ridge Road	\$15.08
134	Evansville, Outside City*	\$14.03
135	Highland	\$13.49
136	South Bend*	\$13.34
137	Petersburg	\$13.25
138	Sellersburg	\$13.25
139	Evansville, Inside City*	\$12.65
140	Martinsville*	\$12.06
141	Lafayette	\$10.80
142	Columbus*	\$10.69
143	East Chicago	\$10.32
144	Elkhart	\$10.04
145	Hoosierland Vistas (formerly Burns Harbor)	\$10.00
146	Lawrenceburg	\$9.51
147	Schneider	\$9.15
148	Country Acres	\$6.00
149	Hessen Utilities	\$6.00
150	Hammond	\$2.20

* Fire protection surcharge for a 5/8" meter is included

** Fire protection charge for a 5/8" meter is included in the base charge

*** Application of the \$3.21 per month fire protection surcharge depends upon customer location

Appendix D – Residential Wastewater Bill Comparison

RESIDENTIAL SEWER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 (FLAT RATE OR 5,000 GALLONS AS NOTED)		
Rank	Utility Name	2008
1	Chimneywood Sewage Works, Inc.	\$80.00
2	Wymberly Sanitary Works, Inc.	\$80.00
3	Lakeland Lagoon Corp.*	\$77.22
4	Sani Tech, Inc.	\$70.00
5	JLB Development, Inc.	\$65.53
6	Centurian Corporation	\$65.00
7	South Haven Sewer Works, Inc.	\$64.95
8	Indiana American Water Company-Muncie & Somerset	\$61.29
9	West Boggs Sewer District, Inc. (metered)*	\$60.20
10	Sugar Creek Utility Company, Inc.	\$60.14
11	Southeastern Utilities, Inc.	\$55.00
12	West Boggs Sewer District, Inc. (unmetered)	\$53.99
13	Aldrich Environmental, LLC	\$50.00
14	South County Utilities, Inc.	\$49.15
15	Apple Valley Utilities, Inc.	\$48.58
16	American Suburban Utilities, Inc.	\$47.50
17	Bluffs Basin Utility Company, LLC	\$46.88
18	Consumers Indiana Water Company	\$45.07
19	Wastewater One, LLC (formerly Highlander Village Sewage)	\$45.00
20	Water Service Company of Indiana, Inc.	\$44.28
21	Anderson Lake Estates, LLC	\$42.35
22	Devon Woods Utilities, Inc.	\$41.88
23	Wildwood Shores	\$41.44
24	Mapletun Utilities, Inc.	\$41.31
25	Cha Utilities	\$41.00
26	Old State Utility Corporation	\$40.79
27	Twin Lakes Utilities, Inc.	\$40.27
28	Eastern Richland Sewer Corporation*	\$40.11
29	Doe Creek Sewer Utility	\$39.50
30	Eastern Hendricks County Utility, Inc.	\$39.00

* Sewer charges based upon metered water usage

RESIDENTIAL SEWER BILL COMPARISON AVERAGE MONTHLY BILL AS OF JANUARY 1, 2008 (FLAT RATE OR 5,000 GALLONS AS NOTED)		
Rank	Utility Name	2008
31	Valley Rural Utility Company*	\$38.98
32	LMH Utilities Corporation*	\$38.55
33	Northern Richland Sewage Corporation	\$38.30
34	Webster Development, LLC	\$36.81
35	Green Acres Sanitation Co., Inc.	\$34.15
36	Hamilton Southeastern Utilities, Inc.	\$33.55
37	Hamilton Southeastern Utilities, Inc. (Flatfork Creek)	\$33.55
38	Utility Center, Inc. (unmetered)	\$31.22
39	Hillview Estates Subdivision Utilities, Inc.	\$30.00
40	Suburban Utilities, Inc.	\$29.29
41	East Shore Corporation	\$29.17
42	Brushy Hollow Utilities, Inc	\$27.10
43	Southern Enterprises Environment	\$25.07
44	Utility Center, Inc. (metered)	\$24.77
45	Driftwood Utilities, Inc.	\$22.61
46	Rivers Edge Utility, Inc	\$22.55
47	Pleasantview Utilities, Inc.	\$21.61
48	Hardin Monroe, Inc.	\$21.00
49	Harbortown Sanitary Sewage Corporation	\$18.00
50	Kingsbury Utility Corporation	\$16.50
51	Hoosierland Vistas	\$14.00
52	Country Acres Property Owners Association	\$6.00
53	Hessen Utilities, Inc.	\$4.00

* Sewer charges based upon metered water usage

Consumer Affairs



2008 CONSUMER AFFAIRS REPORT

Fiscal Year 2007-2008

During the 2007-2008 fiscal year, the Consumer Affairs Division (“CAD”) entered a total of 5,874 complaints related to utility service in the state. Of the total complaints entered, the CAD classified 2,168 or 36.9% of these issues as “inquiries”. The CAD defines an inquiry as an issue which has yet to be regulated or has subsequently been deregulated. This could include matters related to internet service, cellular service, VOIP phone service, long distance telephone rates or cable billing disputes. In this section of the Report, the CAD compares each industry regulated by the Indiana Utility Regulatory Commission (“IURC”) to the previous fiscal year, revealing any recent trends regarding utility service.

Natural Gas

The natural gas industry was fairly stable from 2006-2007 to 2007-2008 and only saw an increase of 13 total complaints. Complaints related to service disconnection increased by 11, while issues related to billing disputes increased by a total of 13. Offsetting these increases, the inquiry classification saw a decrease of 49 complaints from 2006-2007 to 2007-2008. One explanation for this may be that all customer calls regarding pending rates case before the IURC are entered as inquiries, and more than likely, there were more rate cases regarding natural gas service during the 2006-2007 fiscal year.

Electricity

The electric industry saw an increase of 368 complaints from 2006-2007 to 2007-2008; however, the most drastic increase was in the inquiry classification, which increased by 221. This increase is explained by numerous customer calls related to pending electric rate cases before the IURC and Duke Energy’s petition to build a new coal gasification plant in Edwardsport, Indiana. These rate cases prompted numerous customers to call in and voice their stance on the proposals, and, as stated before, these calls are entered as inquiries. Disconnects and billing disputes each increased by roughly 50 complaints, and service denial issues saw an increase of 28 complaints.

Communications

Since the passage of House Enrolled Act (“HEA”) 1279 in June 2006, the CAD began classifying complaints regarding deregulated issues as “inquiries”. During the 2006-2007 fiscal year, the CAD processed a total of 2,072 complaints related to telecommunication service. This total includes 1,290 billing disputes and 130 inquiries. In comparison, the CAD processed a total of 2,236 complaints across all industries, which included 820 billing disputes and 1,080 inquiries. While the amount of total complaints increased by only 164, the total number of inquiries increased by 971, and the number of billing disputes decreased by 470. These differences are most likely explained by the fact that the majority of telecommunication billing disputes are no longer regulated due to the passage of HEA 1279.

Video

The video industry saw the greatest increase in consumer complaints. During the 2006-2007 fiscal year, the CAD received a total of 99 complaints related to video service; however, in fiscal year 2007-2008, the CAD processed a total of 934 video complaints, an increase of 835. A caveat to this increase is that in March of 2008 the CAD noticed an increase in consumer calls related to Comcast’s cable service. In 2006-2007, the CAD processed a total of 56 complaints related to Comcast’s cable service; whereas, in 2007-2008, the CAD received a total of 794 Comcast complaints, an increase of 738. The CAD surmises that the increase in consumer complaints regarding Comcast is related to the company’s purchase of the cable provider Insight Communications Midwest (“Insight”).

During the acquisition, customers complained of multiple billing errors including misapplication of payments and double billing. Customers also indicated that it was difficult to contact Comcast regarding these errors including long wait times and busy signals on Comcast’s toll free customer service numbers. On March 19, 2008 the IURC began enforcing the FCC customer service standards regarding video providers. Since that time, the CAD has entered 193 complaints regarding customer service standards. These standards include the accessibility of the video providers via a toll free contact

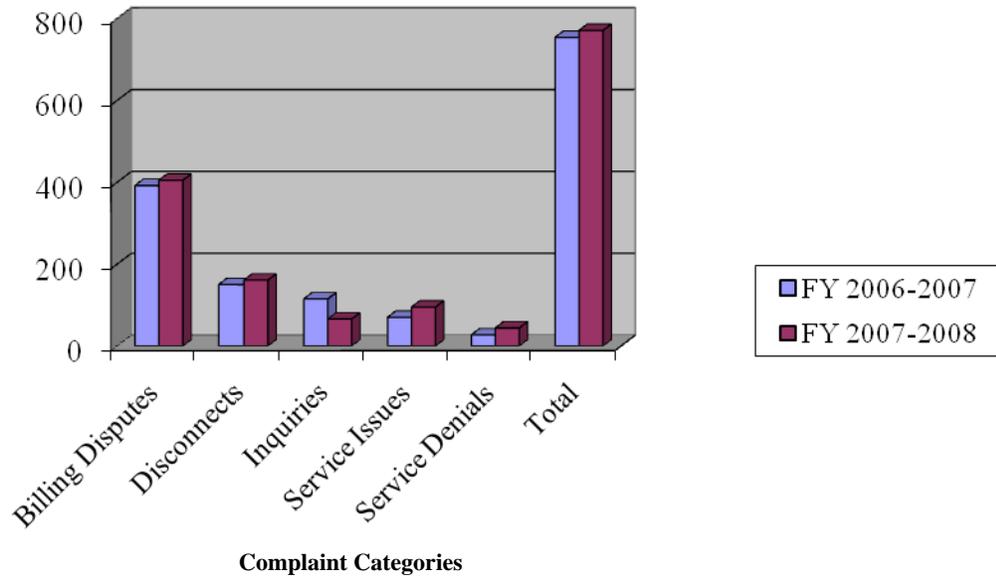
number and a minimum wait time for customers attempting to reach their video provider. Still, the majority of cable service complaints are inquiries and currently outside the purview of the CAD.

Water/Wastewater

The water industry also saw a rise in the total number of complaints with the majority being classified as billing disputes. In 2006-2007, the CAD processed a total of 268 water complaints of which 140 were billing disputes. In comparison, during 2007-2008, the CAD took 748 complaints regarding water service. This total included 561 billing disputes, an increase of 421. However, of the 561 billing disputes, 305 were related to Indianapolis Water Company's ("IWC") practice of estimating customers' bills for multiple consecutive months. This caused numerous customers to overpay for water service as these estimates were based on summer usage and did not accurately reflect the customer's actual usage. This issue was addressed in the *Indianapolis Star*. The CAD noticed a correlation between the increase in IWC complaints and the development of a class action suit against IWC.

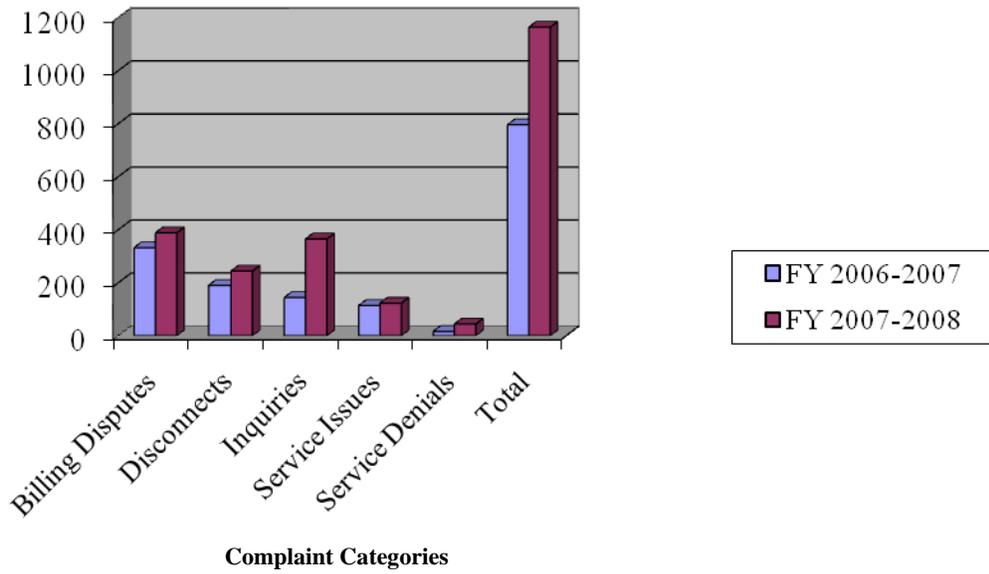
Natural Gas Industry

	FY 2006-2007	FY 2007-2008
Billing Disputes	392	405
Disconnects	150	161
Inquiries	115	66
Service Issues	70	95
Service Denials	27	44
Total	754	771



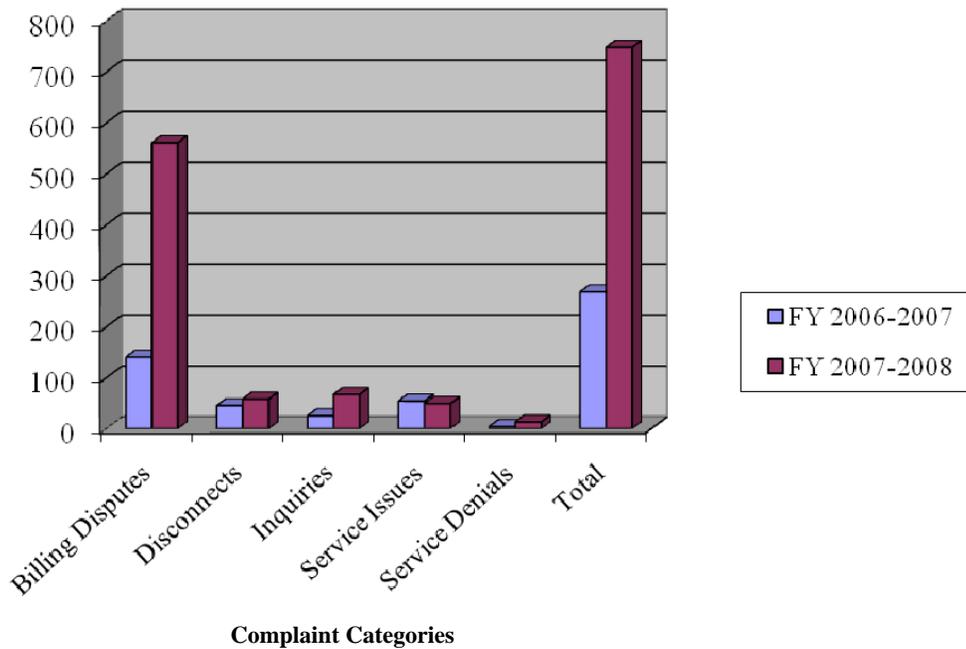
Electric Industry

	FY 2006-2007	FY 2007-2008
Billing Disputes	332	388
Disconnects	190	244
Inquiries	144	365
Service Issues	114	123
Service Denials	16	44
Total	796	1164



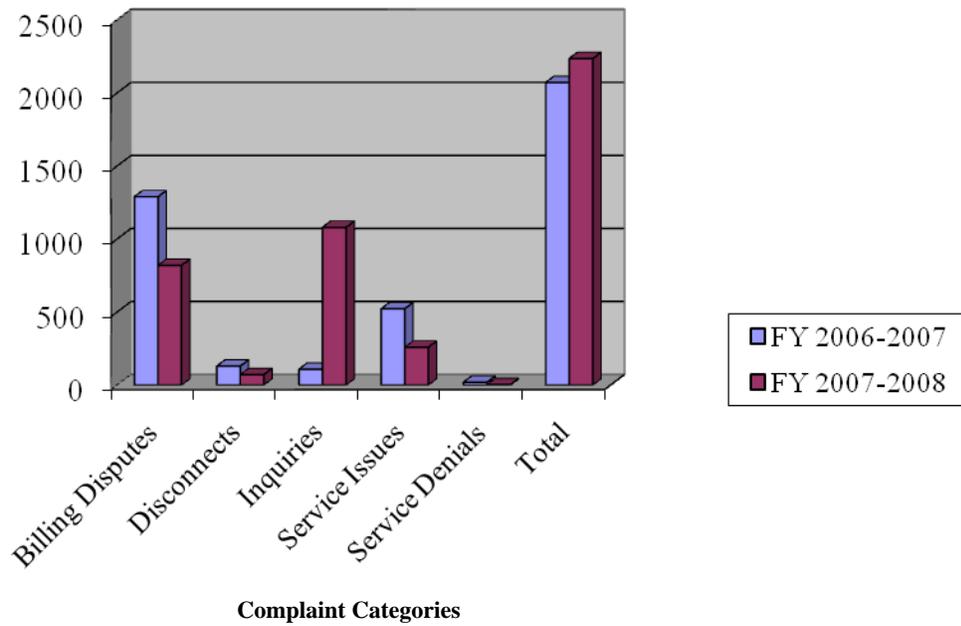
Water/Wastewater Industry

	FY 2006-2007	FY 2007-2008
Billing Disputes	140	561
Disconnects	45	58
Inquiries	25	67
Service Issues	54	49
Service Denials	4	13
Total	268	748



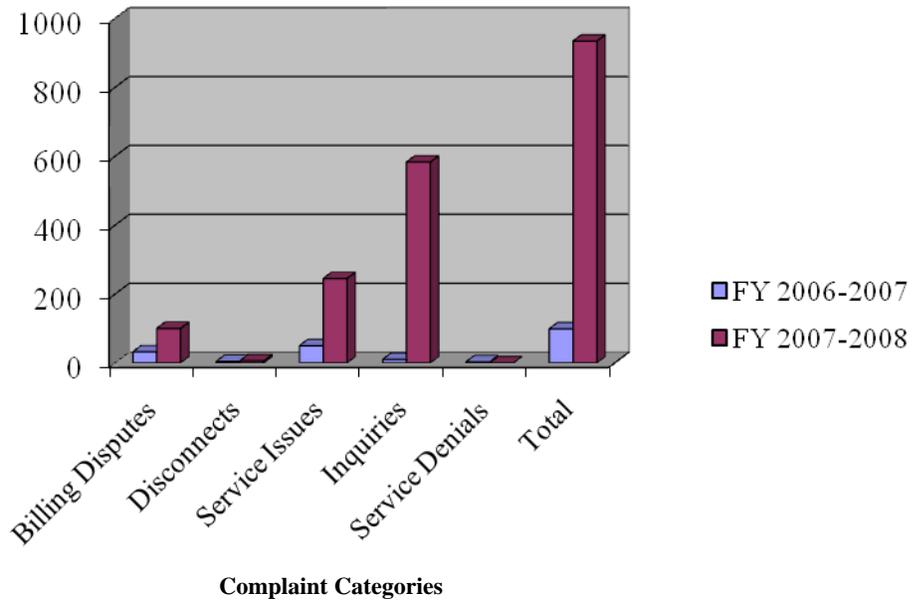
Communications Industry

	FY 2006-2007	FY 2007-2008
Billing Disputes	1290	820
Disconnects	130	72
Inquiries	109	1080
Service Issues	523	260
Service Denials	20	4
Total	2072	2236



Video Industry

	FY 2006-2007	FY 2007-2008
Billing Disputes	32	100
Disconnects	4	6
Service Issues	50	245
Inquiries	10	583
Service Denials	3	0
Total	99	934





Appendix



Strategic
Marketing &
Research, Inc.

Indiana Utility Regulatory Commission

Environmental Scan Research Report

November 2007

**Prepared by:
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Background & Objectives

Most organizations have some form of feedback loop by which they can assess their performance, identify strengths and weaknesses, and thereby strive to continuously improve. Commercial businesses most obviously have financial measures to evaluate success; membership organizations have membership levels, and those in the political arena have the electorate. However, the Indiana Utility Regulatory Commission (IURC) has none of these feedback loops by which to assess performance. The Commission deals with a number of different publics – most notably the individual utilities, rate payers and representatives thereof. But curiously, in their role as a regulator, in many ways the type of evaluations they would anecdotally obtain from these publics are most likely to be negative ones. The fact is they are essentially adversaries in important respects – and as such not a likely source of casual, helpful, directive feedback.

In light of these considerations, it was determined that a structured market research effort designed and conducted by an outside objective research organization could serve to address the feedback void. With the absence of any prior research effort, the design of this program was somewhat exploratory in nature and commenced with the following informational objectives:

- Evaluate the current *touch points* of the Commission with all stakeholder groups and explore the process, quality and effectiveness of these interactions.
- Explore in each stakeholder group beyond the key contact personnel to those influenced by and desirous of the Commissions actions. With this group the impact of the process upon their functionality needs to be explored.
- Review the flow of information, in addition to interactions, and its efficiency and appropriateness.
- Assess the performance of the Commission in terms of professionalism, knowledge, timeliness, inclusive of quality and the sufficiency of the physical facilities from the perspective of all involved stakeholders.
- Identify specific areas of weakness and opportunities for the IURC to improve its performance in order to better serve its various stakeholders.
- Provide detailed conclusions and recommendations regarding strengths, weaknesses and opportunities that could serve as the starting point for the development of a Strategic Plan which would improve the organization and the quality of service it provides going forward.

Methodology

Several considerations went into the methodological design of this research effort. First of all, without any past research programs or models to follow, much of the effort needed to be exploratory in nature. Secondly, given a limited population, every effort should be made to include all interested parties into the surveying. Third, whatever phases of research were executed, client confidentiality needed to be a critical ingredient to help assure candid responses, criticism and direction. These considerations were at the core of the research design which consisted of the following phases:

Strategic Review In order to help develop details of the surveys and interactions with the publics of interest, it was imperative that SMARI have a solid working understanding of the Commission, its role, responsibilities, procedures, limitations and manner of functioning. In order to do so, on several occasions qualitative discussions with the IURC management and staff were held to obtain this working knowledge, address issues and concerns and generally become reasonably well schooled in the Commission's operations and issues.

Initial Qualitative Executive Interviews In order to help ferret out the issues and concerns of the different stakeholders and publics, qualitative executive interviews were conducted with nearly 20 respondents representing a wide array of industries, utilities both large and small, intervenors and rate payer representatives. These took place as an information discussion of issues. A copy of the interviewer's outline can be found in the appendix. On average, these discussions lasted approximately 20 minutes with some extending to an hour's duration. The goal of the interviews was to explore a wealth of topics, uncover critical issues and terminology, and develop preliminary hypotheses of strengths, weaknesses and opportunities.

On-line Group Discussions While one-on-one interviews are an excellent forum for qualitative evaluation, sometimes the dynamics of group discussions help to elicit additional issues and topics as a result of their interactive format. Given the diverse locale of many potential respondents and the ubiquitousness of email and desktop web access for business people, on-line group discussions are just as valuable yet more convenient. To get this interactive input a series of three on-line group sessions was held – one with large utilities, one with smaller utilities and a third with non-utility organizations. A total of 30 individuals participated in these group discussions.

Quantitative Assessment After this thorough qualitative assessment, a survey instrument was developed to quantify the extent of agreement and disagreement with many of the identified issues. A copy of the questionnaire employed is attached. The survey was sent via email to the entire identified population of those with whom the IURC interacts. A total of approximately 150 discrete individuals were identified at the outset of this project. A total of 48 of these respondents completed this quantitative phase.

Special Segments Finally, after the completion of the other phases and a preliminary review of these findings, critical utility, legislative and other higher profile respondents were asked to participate in a final executive interview where some of the initial findings were shared. A total of 11 of these interviews were conducted.

At the conclusion of the data collection portion of this research, the following analysis of the key findings was prepared along with conclusions and recommendations for the Commission to improve its performance and value to the state.

Summary of Findings

The scope of this research effort was large by any measure. From the outset, since the potentially relevant issues were not even well defined, there were truly no topical limits to the study. With the goal being to assess how well the Commission is doing and identify strengths and weaknesses and result in actionable recommendations, every aspect of the Commission and its function, as well as every public it touches, was part of the focus.

In light of the breadth of this investigation, sorting out the results, organizing them and presenting them in a coherent fashion presents another challenge. In what follows, the review will generally be topical with the discussion drawing from all phases of the research rather than each one discussed individually. The result is hopefully a more cohesive, meaningful report document.

Overall Evaluations

The notion of an overall *performance* evaluation of the Utility Regulatory Commission is an unusual concept at first. Minimally, what is one evaluating? Simplistically, it is whether or not the IURC is doing a good job. And the job being evaluated is from the perspective of the respondent.

From a qualitative perspective, most of the comments were generally positive. While people had issues and concerns they seemed to provide overall approval – although more often than not with a caveat.

I don't have any problems with the job that the Commission does.

I have no problems with the Commission or its Staff. I have a positive attitude.

Overall, pretty good with a generally realistic understanding of utility and consumer issues.

Our assessment of the Commission is positive.

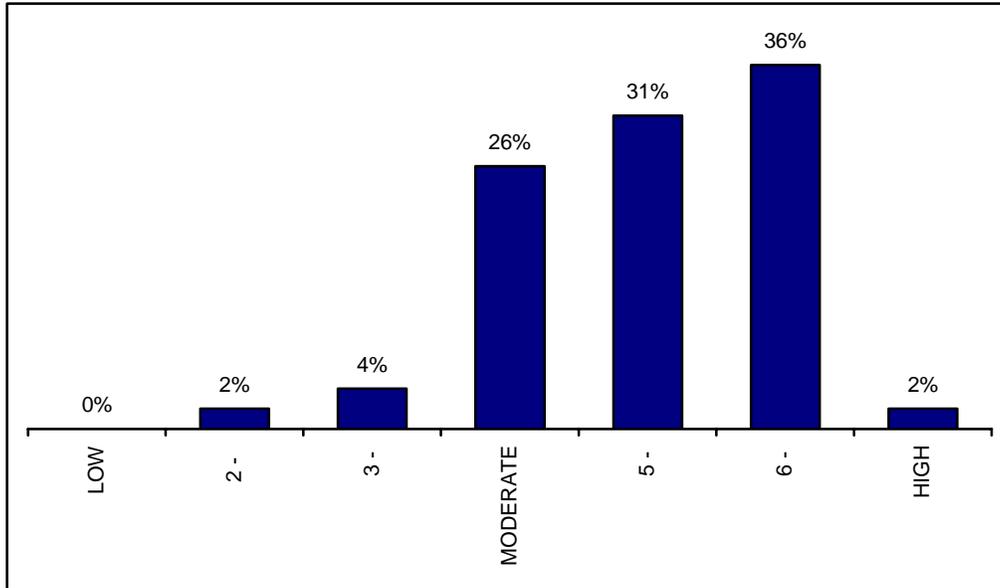
The Commission is diligent and hardworking and its personnel are experienced and generally helpful. Overall, the level of professionalism is good.

I feel that from an overall perspective the Commission does an excellent job. They are interested, engaged and are diligent in their pursuit of learning about/anticipating industry trends. Staff is exceptional in terms of knowledge, expertise and willingness to listen.

For the most part, job disapproval was the exception – but so were comments like the last one above. It was because of this that the quantitative phase of this research was conducted. And in this less anecdotal regard, the findings revealed a positive perspective, but by no means a glowing performance endorsement. Respondents were asked to rate

the Commission overall using a 7-point scale. Overall on this scale the average rating was a 5.02. The distribution of these ratings is illustrated below.

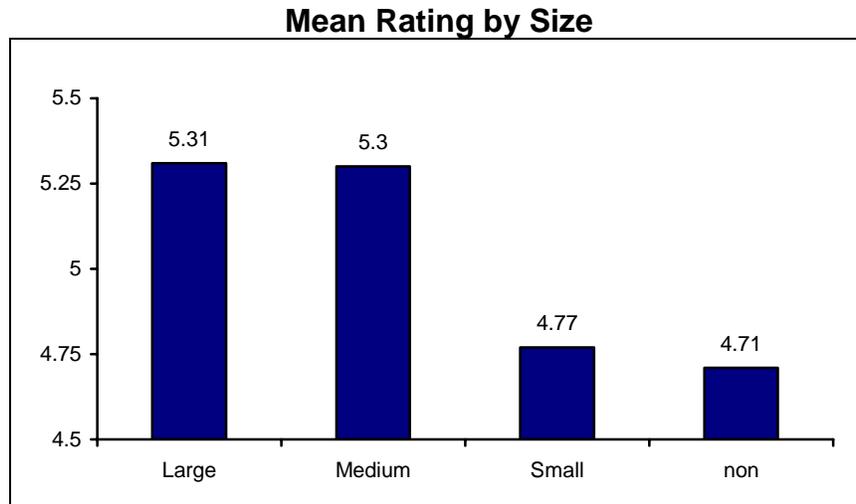
Overall Performance Assessment



This overall performance is acceptable, but by no means excellent. Typically, on a 7-point scale, scores of around 5.0 (or roughly 70%) are considered acceptable and 5.5 (or nearly 80% of the total possible) are considered excellent. While this result is certainly acceptable, it seems to include some degree of qualification. It's like "they are doing a good job, but..." Some of this could certainly be a function of the nature of the evaluation – it could be something that is hard to rate very positively. Additionally, it could also be a function of the respondents and their perspective. In a certain interesting sense, if those being regulated rate their regulator as excellent, is the regulator really doing its job?

On a positive note, while this rating is not extraordinary the fact is that it would appear to be improving. Respondents were asked to compare the performance of the Commission over the last several years to prior to that time and a total of 46% stated recent years have been better as compared to a mere 16% indicating it was worse. As a result, while the rating is merely acceptable, it appears to be improving (in the absence of any tracking research, this sort of self-evaluation over time is the only trending resource available).

Interestingly, this overall assessment exhibited few differences by level of experience, type of relationship, length of experiences and the like; there was a remarkably strong relationship between the overall review and the size of the utility. Specifically, the larger the utility, the more positive the relationship. The table below considers this finding in terms of mean ratings.



As will be seen in much of the discussion that follows, this result should perhaps not be viewed as too much of a surprise. In the simplest perspective, the fact of the matter is that larger utilities have more interaction and communication with the Commission. This yields both comfort and familiarity. Among the smaller utilities, on the other hand, the interactions are far fewer and hence less comfortable. These smaller regulated companies have neither the resources nor experience to interact as effectively.

The reason for this strong correlation will become evident as we consider the primary contributors to these evaluations. But the relationship between size and attitude is quite strong – coupled with a perception of bias toward the larger utilities on the Commission’s behalf. In fact, based on these three statements:

The Commission isn’t sensitive enough to the challenges of smaller utilities

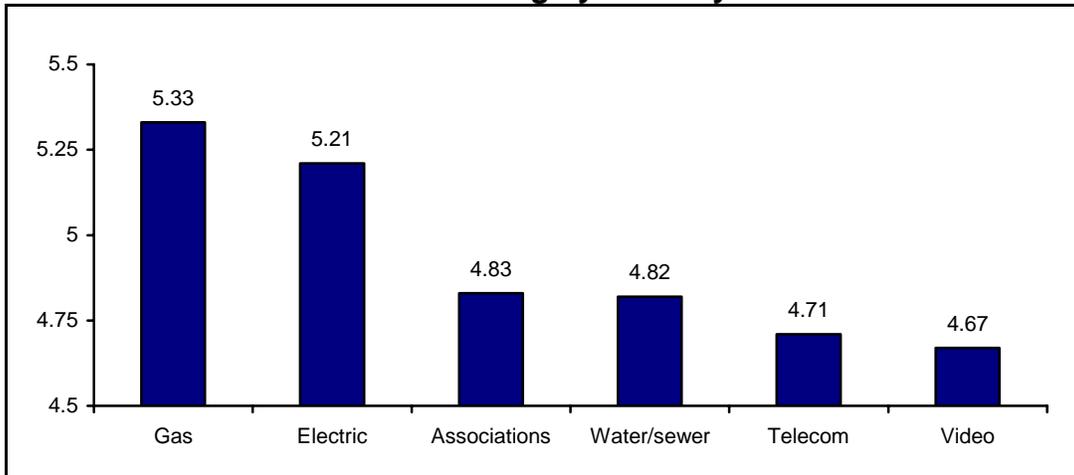
The Commission has a bias toward larger utilities

The biggest problem with delays in obtaining rate increases is the costs incurred by utilities

The class of utility or non-utility can be predicted with 64% accuracy (a rate which is typically quite high with attitudinal data). These are of course directly related to their size, but unquestionably, it is a perception issue.

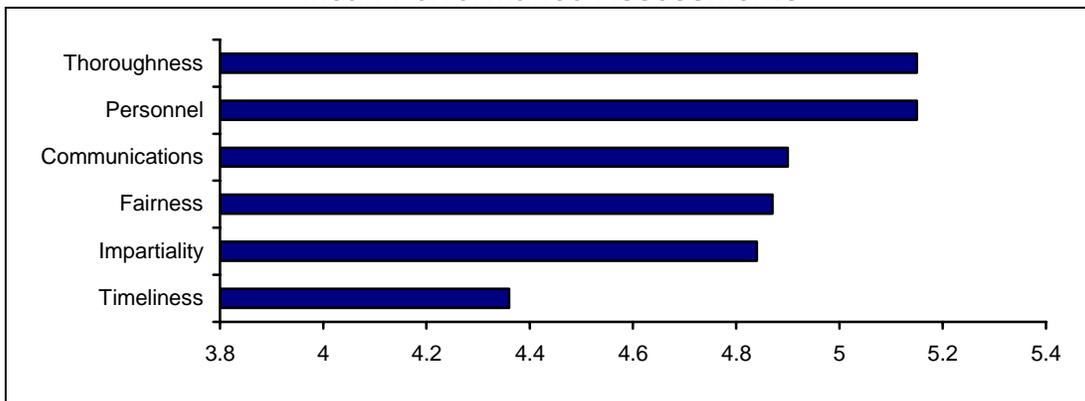
In addition to size, there is a variation in the reaction by industry that is not surprising. Since the role of the Commission with respect to telecom has dramatically lessened recently, their resultant interactions have as well. This, along with less clarity about their role, drives their overall assessment downwards. The gas and electric utilities, which are, of course, generally the larger ones with the highest level of interaction, rate the IURC most positively. Interestingly, however, this pattern of rating is not reflected in the industry assessment of recency – the electric utilities as a group feel the Commission performance has been worse in recent years while deregulated video and telecom are more likely to feel performance has improved. Assessments of how this performance has changes also vary by the size of the utility and likely frequency of interaction. Large utilities report less change as a group which smaller ones report more improvement.

Mean Rating by Industry



Broadly speaking, there are but a handful of recurrent themes which were uncovered in this research. This is despite the fact that innumerable topics and issues were addressed in a multiplicity of forums and approaches. At the highest level, respondents were asked to rate the Commission on six global attributes. These results illustrate the most oft-mentioned area of weakness which was *timeliness*. Interestingly, there is not a tremendous amount of variability in these ratings. But the weakness of *timeliness* is balanced by the relative strength of *thoroughness* – albeit falling below the 5.5 target of excellence.

Mean Performance Assessments



This chart makes clear the most pervasive perception of *timeliness* as a weakness. The lower ratings for *fairness* and *impartiality* could be viewed as somewhat of a concern – and unquestionably fairness is a critical issue. But in many respects, this is just a reflection of the satisfaction with the last case. And as we noted earlier, these ratings all seem to vary directly with the size of the utility with the biggest variance on the question of *impartiality*. This is shown in the table which follows by *indexing* the ratings of each size segment against the overall average. An index of *100* represents the average while *105* would be 5% higher and *95* would be 5% lower. As already seen, the smallest organizations feel the Commission is biased toward larger utilities.

Attribute Ratings/Size Indices

	Large	Medium	Small
Timeliness	107	92	97
Communications	110	93	95
Personnel	105	101	95
Thoroughness	111	93	95
Fairness	108	103	95
Impartiality	111	107	94

While these broad topical attributes provide a generalized context of understanding, the fact of the matter is that the issues are many and subtle. Because of this, one of the purposes of the quantitative wave was to provide an objective measure of some of the key issues that were revealed in the initial qualitative waves. To do so, a list of 21 different statements describing the IURC was developed and respondents were asked to assess their level of agreement with each, again using a 5-point rating scale. These statements are listed below in rank order of their correlation with the overall assessment – as a surrogate for how important each is in terms of driving overall performance appraisals of the Commission. As can be seen, ratings of *fairness* are highly correlated with the overall performance evaluation suggesting that this is a key element of the evaluation. Conversely assessments of staff turnover by individual respondents have no relationship with their overall rating.

Descriptive Statements Inferred Importance

I think the Commission does its best to be fair to all parties involved in its cases	76%
The Commission does a good job of understanding complex regulatory policy issues	64%
The Commission is open to new ideas	55%
Commissioners are more accessible than they used to be	49%
The Commission does a good job handling customer complaints	39%
The Commission has a bias toward larger utilities	33%
The Commission isn't sensitive enough to the challenges of smaller utilities	32%
Many rulings take too long	27%
The IURC needs to better understand new technologies and their impact	26%
Orders need to be made in a timelier basis	21%
The Commission should provide clear guidelines to facilitate cases and settlements	11%
The problem with the length of cases is that it costs more money	11%
The most significant weakness of the Commission is a lack of ethnic diversity	10%
There may be too few staff members to handle all the work of the Commission	8%
The biggest problem with delays in obtaining rate increases is the costs incurred by utilities	6%
Cases settled with the OUCC should be processed with an order in 2-4 weeks	3%
Delays in docketed cases are most often caused by parties other than the Commission	2%
Consumers should have a better understanding of how rates are regulated by the Commission	2%
More female representation is needed on the Commission	2%
Regulatory lag is the biggest weakness of the Commission	1%
There is a high level of staff turnover	0%

A quick review of this list of attributes reveals that those which are most strongly correlated center upon overall assessments of fairness and openness. The second tier of correlations concerns the perceived bias toward larger utilities. The next set of attributes is more specific and mostly related to the pervasive timeliness issue. And lastly, there are very specific considerations which, regardless of the level of agreement or disagreement, are clearly not central evaluative performance concerns. Generally speaking, the relationship of these attributes to overall performance assessments could probably have been anticipated. More importantly, perhaps, is the level of agreement each of these statements receives.

Unfortunately, the mere iteration of these scores in a list is not necessarily the most helpful way to review these types of attribute ratings. As a result, *factor analysis* is quite often used to identify groups of descriptors which are highly related. Efforts to use this approach on these data proved to be unfruitful revealing little in the way of underlying dimensions. For this reason, these overall ratings are summarized below in rank order of the respondent agreement levels.

Descriptive Statements Ratings

Cases settled with the OUCC should be processed with an order in 2-4 weeks	5.20
Many rulings take too long	5.16
The Commission does a good job of understanding complex regulatory policy issues	5.16
The Commission should provide clear guidelines to facilitate cases and settlements	5.14
I think the Commission does its best to be fair to all parties involved in its cases	5.14
Orders need to be made in a timelier basis	5.10
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The Commission does a good job handling customer complaints	4.96
The IURC needs to better understand new technologies and their impact	4.94
The problem with the length of cases is that it costs more money	4.94
Consumers should have a better understanding of how rates are regulated by the Commission	4.80
Regulatory lag is the biggest weakness of the Commission	4.67
The Commission is open to new ideas	4.65
The biggest problem with delays in obtaining rate increases is the costs incurred by utilities	4.59
<hr/>	
Delays in docketed cases are most often caused by parties other than the Commission	4.43
Commissioners are more accessible than they used to be	4.33
The Commission isn't sensitive enough to the challenges of smaller utilities	4.31
There is a high level of staff turnover	4.18
There may be too few staff members to handle all the work of the Commission	4.02
More female representation is needed on the Commission	3.98
The Commission has a bias toward larger utilities	3.88
The most significant weakness of the Commission is a lack of ethnic diversity	3.06

Here again we see some growingly familiar themes. Among the top rated statements are those which center upon both fairness and timeliness. The next group of statements reveals disagreement and indifference on the part of those participating, and the third set

of descriptors again relates to some operationally specific comments. We will consider these in some depth later in the discussion – however, this provides a general overview.

It is nonetheless interesting to note that given the strong correlation of some of these variables with the overall performance assessment of the Commission, a small set of data points can be excellent predictors of individual responses. Specifically, based on the following four attributes, the overall rating can be predicted with 67% accuracy.

- Many rulings take too long
- I think the Commission does its best to be fair to all parties involved in its cases
- The Commission does a good job of understanding complex regulatory policy issues
- Commissioners are more accessible than they used to be

In part these attributes help to identify the handful of core issues which can be used to define the topics of the Commission's.

Timing

The fact of the matter is that no single issue aside from timing was more universally discussed regardless of segment, size, industry or experience. This is not to say that it is the most important issue in terms of excellent performance. Rather, it is simply the most pervasive. This was the top of mind comment almost regardless of setting or respondents. Consider some of the general timing comments that have been made.

“...the Commission takes too long to generate a decision and the cost to see a rate case is too high.”

“Regulatory lag continues to be a bit of a problem.”

“I believe some rate cases take too much time.”

“Timeliness is not good at the IURC. Most processes are very slow.”

“Rate filing process seems to take too long. Utilities lose flexibility, momentum, and can experience financial hardship if not timed properly.”

The timing problem appears to manifest itself in a variety of different ways which may require different consideration. These consist of two primary categories – generalized observations about the timing of decisions with rate cases, and most significantly the timing of rulings concerning settlement agreements. The feelings about each of these, the problems they create and the strength of the reactions vary somewhat widely.

The challenges with rate cases are many-fold. They begin with the fact that these are so often complicated and require detailed consideration of complex issues by a number of parties. The fact is that most of those participating in this research recognize this reality. The regulatory process is by its very nature a slow, painful process. And, it is oftentimes

one that is exacerbated by all parties involved. The filings themselves consist of oppressive detail which is then multiplied exponentially by all parties involved. The Commission itself was sometimes seen as having a bit too academic an approach to the issues.

“The regulatory process is inherently slow.”

“Very thorough -- in fact, too thorough for my tastes.”

But while most everyone agreed with timing being a problem, it was not one for which an easy solution could be found. When challenged, very few of those with whom the timing issue was discussed forward much more than a suggestion that timing become a priority of the Commission. Generally, however, the feeling was that a time limit of 9-10 months should be established and adhered to. Consider some of the comments in this regard:

“The Commission rules generally provide for issuance of rate case decisions within 90 days of receiving the parties' post-hearing filings. If this rule was adhered to all the time I doubt people would complain. As long as the Commission makes timeliness a known priority to its people, then I am not sure more can be done.”

“The Commission should follow the very reasonable 10 month deadline for orders in its own Minimum Standard Filing Requirements Rule, a deadline which the Commission has proposed to eliminate.”

“The parties and the Commission should be required to complete a rate case (i.e. issue a final order) within nine months of the filing of the case in chief. Procedural schedules should be required to fit within this timeframe and rates should go into effect if an order is not timely issued, absent extenuating circumstances.”

“9 to 10 months; undertake whatever is necessary internally to speed the process.”

“When it comes to rate cases, procedural timelines need to be addressed in order to shorten the time between when a case is filed and when an order is issued.”

“While much of the time taken from petition to order can be attributed to the parties, the Commission could impose more discipline on the process and on its responsibility to issue timely orders.”

The fact of the matter is that most of those surveyed found fault with the timing of the existing paradigm but were simultaneously unwilling to suggest or even accept significant change. Some ideas were forwarded for consideration:

- Increasing staff
- *Rocket Docket* having utilities pay for expedited service
- Limit rate regulation through increased use of *trackers*
- Use greater rigor from the bench to disallow delays
- Impose a statutory time limit or allow for rate implementation and revenue subject to refund prior to rate approval
- Different programs for larger versus smaller utilities
- Develop a *process map* and evaluate how to speed the process

None of the concepts was particularly well embraced. Clearly there is some comfort with the status quo. In fact, as one respondent noted, *“We should be careful about changing a*

pretty well functioning organization.” In fairness, the concept of an increased staff was generally felt to be outside of most respondents’ purview or understanding – and the staff issue will be discussed shortly. The idea of expedited cases obviously violates a fairness tenant. However, the issue of distinguishing between large and small utilities does require some consideration.

The perception that the Commission is biased toward large utilities has already been noted – and in part this is a function of how rate cases proceed. The fact of the matter is that larger utilities are more equipped to handle all the administration involved in a case – from staff lawyers and departments to even internal resources. For very small utilities the demands of a case may all fall upon one person. This certainly strains resources. As does delays in timing. The longer a case drags out, the more it costs the utility. And while this cost may be recaptured as part of the case, so doing just passes these additional costs to the rate payers. In light of these considerations, it is reasonable to think that size matters – and perhaps some of the staff can be dedicated to handle the cases of smaller organizations. This bureaucracy may be what has driven some municipals to *opt out* because of their strapped resources. This issue would seem to warrant further consideration. It was reported that there is a tiered process in place for rate cases for small utilities – however, much like the IRS short form, a utility can quickly be disqualified making it of limited use.

However, beyond this, timing is a problem which clearly should be addressed and may require more than just making it a priority. Rather, steps to realize timing efficiencies should be aggressively pursued.

While timing overall was nearly universally discussed and recognized as a weakness, the timing of rulings on settlements was an issue which those who participated found hard to comprehend.

“If the case is settled, I see no reason why it should take longer than 2-3 weeks to rule.”

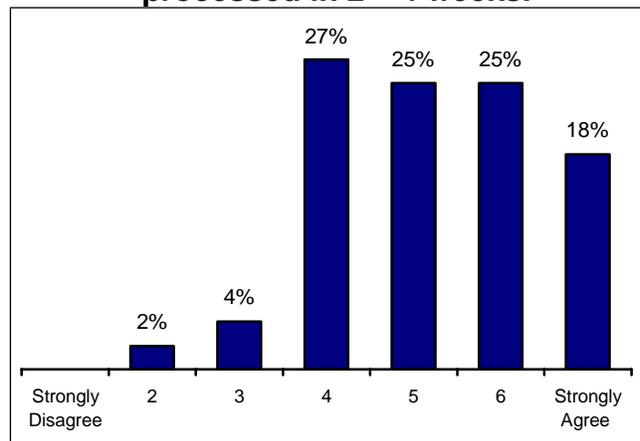
“90 days is too long to receive an order in a settled case.”

“Cases settled with the OUCC should be processed to an order within 2-4 weeks.”

In fact, in the quantitative phase the statement regarding the amount of time to rule on settlements received the highest level of agreement. While timing is seen as a problem, issues surrounding settlements were addressed the most passionately. There are actually several issues at play here which demand some close examination.

Perhaps most superficially there was the feeling that if the utilities and other parties such as the OUCC representing the consumer and any other interveners arrive

Cases settled with the OUCC should be processed in 2 – 4 weeks.



at an agreement, shouldn't the Commission generally accept it? Presumably all the parties are involved in the agreement and as such, their interests should be reasonably protected.

“When a settlement agreement is unanimous, I would encourage that the review be more deferential to the parties that have agreed to it. I can understand that if there is a term in a settlement that specifically affects someone who is not represented in the proceeding, there may be a reason to view with greater scrutiny. However, especially where there are intervenors who have actively participated, if the parties have reached a unanimous settlement, there seems to be much less need for oversight.”

“Review the settlement agreements for reasonableness. Revise if in conflict with previous cases.”

Of course, part of the challenge here is that the Commission itself is not party to the negotiations and thus has to start anew when presented with a settlement. And it is certainly perfectly possible that in the absence of participation, the underlying rationale and quid pro quo of an agreement may well be lost. In other words, agreements without the process may appear to inappropriately deal with issues when in fact, they are molded out of compromise. A suggestion that the Commission participate in the negotiations was quickly rebuffed. But unquestionably, the issue appears to be somewhat problematic. What is most objected to is the time it takes after a settlement is reached to reach a decision regarding it AND the tendency to meddle with some of the terms of the agreement. Consider the following comments:

“I think the tendency to redo negotiated settlements is a problem because parties have engaged in a give and take arms length negotiation process and made difficult choices only to see key terms redone yet again changing the nature and fairness of the bargain struck.”

“The Commission should try to limit such modifications which play havoc with the deal that was struck...the Commission was not at the table and often cannot know the relationship of bargained terms to one another. I think it ultimately is a matter of being cautious in modifying deals and only doing so when deemed absolutely necessary in order to approve.”

“The Commission has altered the deal struck in several situations by renegotiating the terms--so a utility will give something material up to obtain something it wants and the Commission will approve the settlement but cut the utility's part of the quid pro quo in half, thereby gutting the intent....the utility can either reject the settlement and start over or take the revised deal.”

“The Commission's job is to review, not renegotiate. At times the Commission will modify settlements to change mechanics or future review opportunities which is far more appropriate than taking an after the fact seat at the table and redoing what had been done without the benefit of the months of negotiation that occurred.”

This is clearly an issue which needs to be addressed in some way, although the recommended resolution is not clearly obvious. To a large extent the challenge is that both the points of view have some merit. The preceding comments cannot merely be

dismissed – they happen to make some sense. At the same time, the Commission unquestionably has the right and authority to review these agreements in their entirety. The solution may well lie in better communication, an issue to which we now turn.

Communications

Communication is undeniably a large topic – but nonetheless one that was frequently discussed and one which is critical to ongoing performance success of the Commission. From a broad perspective, while timing was the most often mentioned area of weakness of the current Commissions, communications was continually mentioned as a strength.

“I see communication as strength for the Commission.”

“The one thing they do fairly well is to communicate.”

Of course part of the challenge is understanding what this means, what communications are needed, where they are well exercised and where improvements are needed and can be helpful.

In general, the positive comments about the current Commission’s communication effort were broadly suggestive of more openness, interest and willingness to understand the challenges faced by utilities. This was typically a broad characterization about the Commission’s general interest and inclination to communicate. To some it meant being open to new ideas, to others it meant plant tours, to still others it meant the use of technical workshops to help everyone get up to speed. Communication is seen as a major charge and priority of the current Commission – and that is seen to be a good thing.

The positivism of such a disposition is undeniable. The more the Commission interacts with utilities, the better they understand their business. On the other hand, the more the utilities understand the priorities, stands, positions, and direction of the Commission, the better the interaction on cases will ultimately be.

From a philosophical standpoint, it certainly appears that the current Commission is positioned in precisely this fashion.

“Most IURC personnel are very accessible.”

“I think this Commission has held more technical conferences and workshops to understand issues and that is an excellent practice.”

“The Commission is accessible and welcomes informal discussions when appropriate. They are cordial, friendly and willing to listen even if they hold a contrary opinion to yours.”

And the fact is that there is a recognition that enhanced communication results in better understanding on all sides. Just as the Commission needs to improve its understanding of the utilities and their interests, the utilities need to better understand what the

Commission is looking for. This could help focus cases on the critical issues rather than a plethora of ancillary materials designed just for thoroughness and completeness rather than any other value.

“These are important, but it would be valuable to have some level of feedback as to the policy directions that the IURC would like to see adopted by companies.”

In light of this consideration, the question must be asked of how to further enhance communication. However in many cases this issue presents a conundrum. For example, the timing and ex parte communication of rate cases are a barrier to greater communication. As a barrier, they slow the process and reduce communication.

Consider the following:

- More informal communication could serve to help expedite cases
- Slow timing in rate cases inhibits communication
- Ex parte rules, while logical, may be the cause of problems with acceptance of settlement agreements with the Commission not being privy to the issues and compromises that drove the agreement.

These issues suggest several ideas regarding the further enhancement of communication efforts (and this is an issue which is additionally exacerbated by the large/small dichotomy).

First, one issue is whether the problems with settlement agreements explored earlier are simply a communication issue. That is, if the Commission merely takes the agreement, which can differ widely from the issues of the initial case, review these materials in the absence of an understanding of the compromises that drove the settlement, misunderstanding and resultant changes seem likely. Ex Parte communication rules certainly allow an informal discussion of this background prior to the Commission review and may provide important contextual data.

Secondly, if the Commission could make clearer its positions, inclinations, and policy direction prior to rate case filings, then these could be focused upon the issues which make a difference as opposed to addressing every possible issue and nuance and thereby generating enormously more materials for consideration and lengthening the timing of the case.

Third, the more informal communications which take place – the more site visits, regular discussion of business and issues and the like – the better understanding both parties will have of one another on an on-going basis. This will facilitate all formal proceedings

Finally, the more timing issues are expedited, the more time that is available for other communication efforts which can further enhance timing of cases.

In simple terms, communication between all the parties on a regular basis is a key for not only better understanding, but more timely execution of the Commission’s regulatory

duties. And while communication is unquestionably an area where the current Commission has vastly improved, there clearly is room for additional growth in this arena. Of course the biggest caution in this approach is the danger of compromising impartiality or even giving the appearance of partiality.

Of course, one of the primary challenges to the ability to communicate more and more effectively is the burden of the existing work and case load on staff. Undeniably, the encouragement of more communication efforts will simply exacerbate this work load in the short term. In part this seems a “catch 22” – communicating more would facilitate the process but the process is too burdened to communicate more at this time. This leads to another critical issue of concern and that is staffing.

Staffing

Like the communication issue which was seen as an area of improvement of the current Commission, initial comments from most of those participating in this effort involved praise regarding the staff.

“Personnel seem to be well qualified and helpful.”

“Staff is exceptional. They are honest, open, helpful, willing to learn and listen.”

“Very knowledgeable and experienced.”

“Technical staff is outstanding and very, very knowledgeable. No weaknesses to speak of.”

“The staff is great.”

These plaudits were generally widespread among respondents – although they were not without qualification. Generally, it seemed that the qualifiers were situational – how to attract and retain high quality staff to a low paying government position. These global observations are illustrated below.

“Staffing is a challenge for any Commission as it is trying to attract talent smart enough to understand difficult issues, but willing to work a government position. The Commission has done a credible job in this effort, but turnover occasionally loses capable employees.”

“Inability (probably beyond its control), to retain Commissioners, ALJs, and staff for the long term.”

“There is a lot of expertise at the Commission, despite low pay and high turnover.”

While discussion about the quality of the staff was somewhat mixed, generally speaking, the message seemed to be that quite probably the Commission as it stands at the present is understaffed. Limitation in staffing will undeniably exacerbate timing concerns. And the sense of some was that while the number of cases in front of the

Commission in the past had somewhat slowed, this should be expected to change and result in a heavier workload as the industries experience rapid change. This will further challenge the staff. And while this is no doubt centrally a budgetary issue, some respondents mentioned being willing to pay more in fees. Ultimately, this budget issue should be looked at from the perspective of consequent costs. As has been mentioned, if limited staffing lengthens the process of docketed cases, which increases their costs, which are passed on to the rate payers as well as limiting communication opportunities, which further slows the docketed case process and increases costs, allocating additional funds should have a positive financial benefit to the residents of the State.

Miscellaneous

While the foregoing represents the broad issues of concern that arose through the course of this research, there were a handful of small particulars that were mentioned by some respondents which may warrant attention.

Perhaps one of the broadest areas of concern relates to a diversity issue mentioned on several occasions by a variety of respondents. Generally, this comment was in an open ended fashion without much qualification or explanation – either observing the absence of diversity at the Commission or the need for it. Attempts to clarify the issue in the quantitative effort failed to reveal generalized concern in this arena – comments about ethnic diversity and the female representation were among the lowest rated of all the attributes. However, this does not mean this issue can be dismissed – these lower ratings are a function of two things. First, there is generally an absence of diversity among the utilities themselves which are regulated. And secondly, this isn't the Commission's biggest challenge but rather a consideration which ought to be kept in mind and addressed at some point.

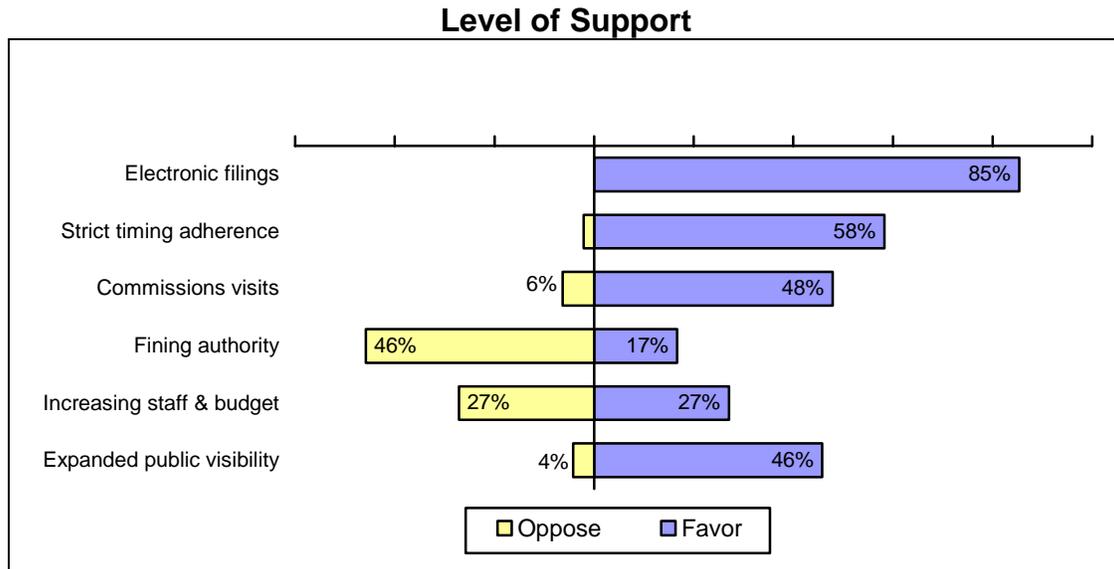
A number of specifics were also explored; some already discussed in detail, while others not addressed at all. In the quantitative phase, those surveyed were asked whether they favored or opposed some of the specific issues that had been raised in earlier qualitative phases of this research. The results provide direction and even clear consensus in some areas.

First, unqualifiedly, electronic filing is something that is desired by nearly everyone and opposed by no one. This would appear to represent something of a mandate to pursue this alternative filing mechanism.

Consistent with the earlier discussion regarding timing, more strict adherence to timing requirements has little opposition and strong support. The findings are similar for encouraging regular Commission visits to utilities and other constituents. An almost identical finding was revealed for expanding the visibility with the public to build understanding.

The idea of giving the Commission fining authority was, perhaps not surprisingly, ill

received. The recommendation regarding increasing the staff and budget of the Commissions received a neutral response. This is not inconsistent with the comments throughout the research about staffing – in part; this is a function of those responding more often than not have insufficient data to express an opinion on staffing levels. Those willing to do so were generally drawing conclusions from the staffing levels and timeliness of other Commissions with which they deal.



In addition to these quantified concerns, a number of specific issues were raised from a limited number of respondents.

- There was concern expressed about the reorganization of the ALJ’s and general counsel. A number of mentions felt this was inappropriate. Minimally, the Commission needs to better communicate the rationale and support for having made this change.
- Use of email communications instead of faxes to improve communications and timeliness.
- Continual improvements of website – with such tools as a master list of pending cases and navigation improvements rather than reliance of case numbers.
- Allow for electronic participation in hearings.

Public Visibility

It was mentioned by several of those participating that the public needs to have a better understanding of the Commission, its role and function. The fact that the Commission is changed with balancing the interests of the utilities **and** the public, yet the public could not be meaningfully surveyed, is an important example of the challenge. While mentioned, it is difficult to assess the importance of this concern – given that for the most part the public was not invited to participate in this process.

However, it is important that the Commission remain sensitive to this issue insofar as they are protectors of the public interest. And simply doing so through the representatives of the public such as the OUCC and through public hearings is perhaps, to some degree, insufficient. Consideration might be given to ways to communicate with the general public in less formal settings to obtain input from this important sector.

Of course, one aspect of the Commission's function which received surprisingly little discussion was the Consumer Affairs division. In part, this seemed to be the result of good consistent performance on a regular basis. Not that this area was completely free of criticism – some respondents had problems and think that there could be better communication and timeliness (to repeat a theme seen here). But for the most part this point of connectivity seems to function well and serve a valuable purpose.

At the same time, the fact that Consumer Affairs does have regular contact with the general public (albeit a skewed segment thereof) a similar investigation into their performance with customers ought to be pursued in a rigorous, quantitative fashion to assess this important audience as well.

Conclusions & Recommendations

As was noted at the outset, the focus of this research was exceedingly broad, the population narrow, and the exploration deep. The general goal was to evaluate the Commission and its most recent performance and to make recommendations to improve.

Broadly speaking, the recent performance of the Commission received good reviews. They were applauded for enhancing communication efforts, openness and willingness and interest in visiting utilities. The public face of the Commission has been widely regarded as well. And what has generally been viewed as having a greater interest in economic development and being more business friendly was generally well received. Although the other side of this coin is a segment of those interviewed who simply regard the Commission as a political arm of the Governor promoting his agenda.

Despite all the plaudits there were significant problems and opportunities identified. The primary issues were:

- Timing of orders
- Handling of settlement agreements
- Communication of stands/positions

Nearly all the issues that were discussed centered upon these three topics. While detailed discussions have been forwarded in the body of this report, in brief review the following would be forwarded as possible changes for the Commission:

1. Increase communication efforts whenever and wherever possible. Have more site visits, get staff out of the office, have more informal meetings, regularly meet with utilities and other constituencies, be open about the Commission's agenda and views and criteria, and so forth.
2. Focus upon the timing of orders – whether this means strict adherence to schedules, disallowing delays, or simply making it a priority. Serious consideration to process mapping all the Commission functions may well help lead to identifying efficiencies and redundancies.
3. Make efforts to better communicate in the cases of settlement agreements. Whether this means sitting with all the parties prior to reviewing the agreement or incorporating settlement issues in the agreement, this is clearly an area of concern to all utilities.
4. Provide a better mechanism for smaller utilities to engage in cases without undue pressure on their more limited resources.
5. Consider budget increases and additional staff to help with timeliness and communication efforts.
6. Implement electronic filing.



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March 6, 2008

Dear Interested Parties:

On behalf of the Commission, I am writing to thank you for participating in the independent and confidential survey of the Commission's performance.

The Commission engaged David Seiferth of Strategic Marketing & Research, Inc. to conduct this review. Upon completing his survey and discussions with the participants, he has incorporated your responses into a quantitative and qualitative format entitled *Indiana Utility Regulatory Commission Environmental Scan Research Report, November 2007* ("Survey Report"), a copy of which is enclosed. This is the entire report as delivered to me—there are no edits or deletions.

The purpose of undertaking an independent survey was to give those who are involved with the Commission's activities a direct and confidential opportunity to speak to the Commission's performance. Your feedback is valuable to the Commission as it allows us to understand both the areas in which we are doing well and where we can improve. By the time you receive this, each Commission employee will have received the Survey Report, the Commission's response (this letter), and attended a meeting where both were discussed.

I am pleased to see your responses indicated that the Commission is doing a good job. Participants ranked our thoroughness, personnel, and communications as strong assets. Overall, you gave the Commission a positive rating.

The Survey Report also indicates areas that warrant attention. Specifically, there are six areas in which you indicated the Commission should focus: 1) Enhancing Communication on Policy Issues; 2) Shortening the Time in Which Orders Are Issued; 3) Approving Settlement Agreements Faster; 4) Small Utility Issues; 5) Increasing Staffing, and; 6) Implementing Electronic Filing. I have included the Commission's initial response to each of these items below.

Enhancing Communication on Policy Issues

In an effort to further increase communication the Commission has engaged in technical workshops, either as informational seminars, or in connection with docketed cases, to informally discuss various issues. In addition, parties to docketed proceedings may communicate with the Commission, outside of a hearing, in a manner that complies with the ex

parte rule. The Commission is available to discuss various issues so long as that communication is legally permitted, and the Commission intends to increase its effort in communicating with various utilities and other participants.

By an extensive series of rulemakings, the Commission has attempted to improve and simplify its interactions. Discussion during the process has been valuable and changes resulting therefrom are designed to enhance those lines of communication.

The Commission believes that communication consists of both speaking and listening; we are prepared to do both.

Shortening the Time in Which Orders are Issued

Case processing is a shared interest. When this issue has been recently discussed in conversations with companies, it has become apparent some existing options have been underutilized that could improve timeliness. For instance, a petitioning party could file its case-in-chief concurrently with its petition, which would eliminate some delay. A party could better utilize the Commission's expertise by routinely meeting with staff prior to filing its petition in a manner consistent with the Commission's ex parte rule. Finally, a Petitioner has the option of filing its case under the Commission's Minimum Standard Filing Requirements rule, which provides for an expedited schedule and order within ten months of a complete filing.

With respect to the delay between proposed orders and order issuance, one commenter suggested that there would likely be little complaint if orders were issued within 90 days of the filing of proposed orders. The Commission believes that this is the timeframe for consideration and issuance of the vast majority of its orders. As all will appreciate, the Commission speaks through its orders and devotes considerable resources to being clear and direct. The Commission also is aware of the appellate review process and crafts its orders with this in mind as well. However, in response to issues raised in the survey we are conducting an internal review to determine the extent to which the Commission meets a 90-day turnaround.

Approving Settlement Agreements Faster

As stated by the Indiana Court of Appeals:

Indeed, an agency may not accept a settlement merely because the private parties are satisfied; rather, an agency must consider whether the public interest will be served by accepting the settlement.

Citizens Action Coalition of Indiana, Inc. v. PSI Energy,
664 N.E.2d 401, 406 (Ind. Ct. App. 1996), *citing* C. Koch,
Administrative Law and Practice § 5.81 (Supp. 1995).

Clearly, determination of the public interest rests solely and exclusively with the Commission. A settlement does not substitute for or circumvent that sole and exclusive obligation. Indeed, a settlement must be supported as must any other petition.

Unlike civil proceedings in which a court need consider only the interests presented by the private parties, the Commission has been delegated the responsibility to determine whether a settlement is in the public interest. Accordingly, a settlement unanimously reached by the parties involved does not relieve the Commission of its obligation to review the terms of the settlement and make an independent finding that the settlement is in the public interest.

The Commission believes the public interest determination relates to the satisfaction of the public trust. When the public is affected by a Commission order—for example, an order increasing rates—it is entitled to the same degree of explanation for that action whether such action is a result of a settlement or a contested proceeding.

With respect to the modification of settlements, the Commission does so only when it determines that a modification is necessary to meet the public interest standard. Issuing an order approving a settlement with modifications is an extra effort by the Commission to respect the efforts of the parties which do not meet the public interest standard but come close. If a party believes that the modification is not a change to which it can agree, the party has the option of rejecting the modified settlement.

Small Utility Issues

The Commission currently has statutes and rules specifically providing for a more streamlined process for utilities serving fewer than 5,000 customers. Because the ex parte rule does not typically apply to these small utility proceedings, small utilities may maximize the Commission's expertise through ongoing communication with the Commission and the Indiana Office of Utility Consumer Counselor. Additionally, there is a pending proposed rulemaking for the small utility filing procedures, 170 IAC 14-1. Legislative changes may also be appropriate. The Commission intends to increase its communication efforts with small utilities to inform and educate them concerning the procedures and timeframes currently in place.

Increasing Staffing

Since 2005, the Commission has increased its staffing. The Commission has had an increased workload and anticipates a further increase in the coming year and plans to adjust staffing accordingly to meet that demand, to the extent possible. In all candor, even though the administration has been very supportive, there are fundamental issues with state employment that make it difficult to attract and, especially, retain employees. With high turnover, the cadre of experienced employees must perform their assigned tasks as well as train new employees.

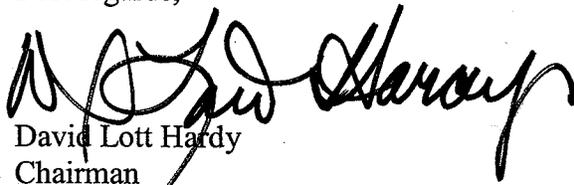
To some extent, this is a resource issue and may benefit from additional expenditures. It would be beneficial for all participants to think through the willingness to commit to an increased level of expenditure in order to recruit additional staff and retain existing staff. Without that commitment, the resolution of this issue is not apparent to me.

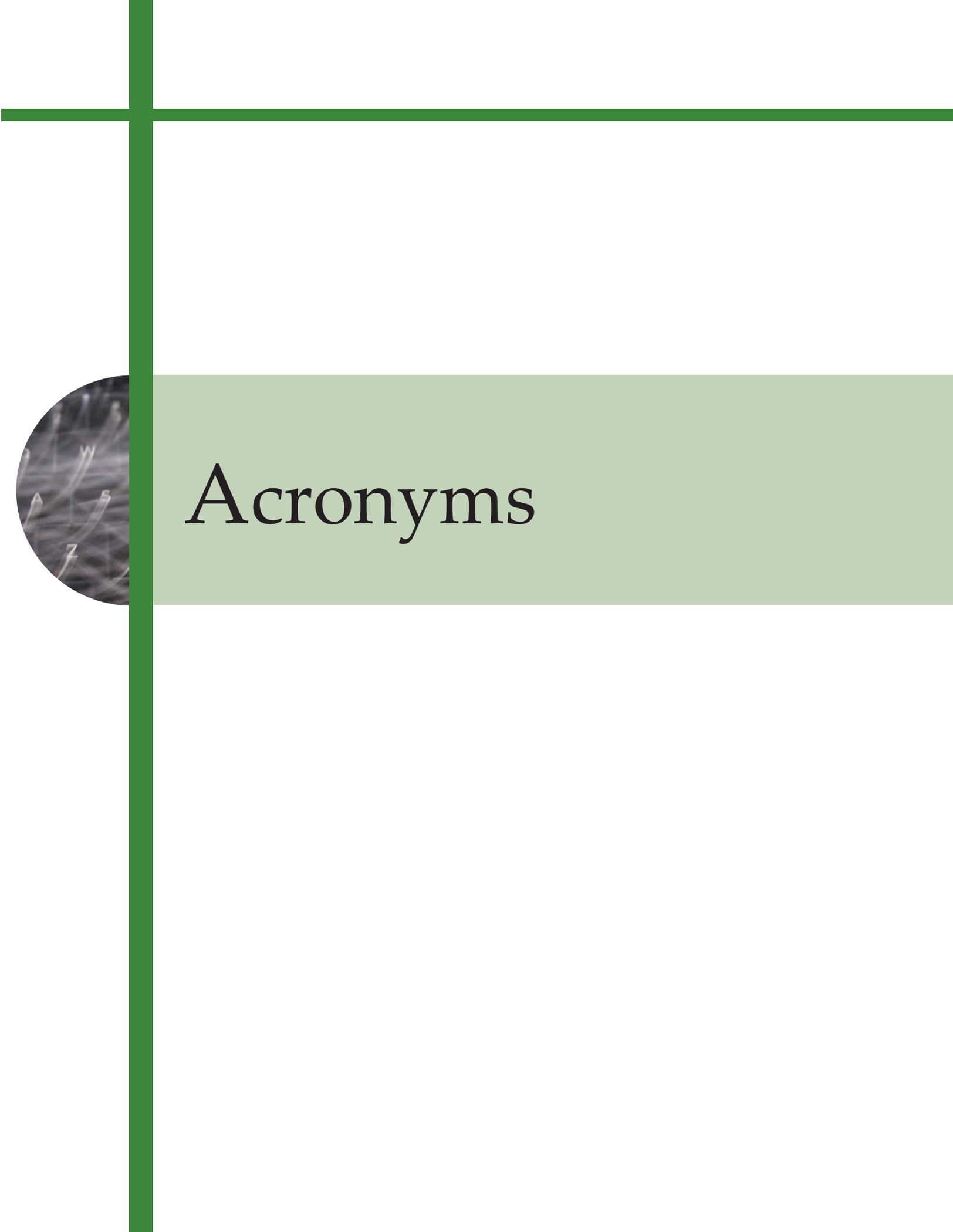
Implementing Electronic Filing

The Commission is currently addressing changes to its online filing system and will consider electronic filing as part of that process. The Commission will work with stakeholders in determining what features should be incorporated into the system. At the same time, implementation of electronic filing will need to be consistent with our obligations under public records laws and the requirements of our document retention schedule.

The Commission routinely reviews ways in which we can make the regulatory process more efficient and relevant to the needs of those who must utilize it. It is our hope that the Commission can continue a dialogue going forward so that we can continue to find new ways to improve. At the same time, there is much that you, the stakeholders, can do, using our current rules and procedures, that may help you obtain the results that you indicated were important. Please feel welcome to pursue individual conversations on the Survey Report or our response. If any of you believe it useful to contact Mr. Seiferth directly, please feel welcome to do so. I look forward to listening to you and continuing to work with you.

Best regards,


David Lott Hardy
Chairman

A decorative design featuring a thick green crosshair that spans the entire page. A circular inset on the left side of the page shows a close-up of a plant with thin, white, hair-like structures. A horizontal light green bar is positioned behind the title text.

Acronyms

ACRONYMS:

ADSL – Asynchronous Digital Subscriber Line

AEP – American Electric Power

AFUDC – Allowance for Funds Used During Construction

AGA – American Gas Association

AOS – Alternative Operator Service

ARP – Alternative Regulatory Plan

AWWA – American Water Works Association

Bcf – Billion cubic feet

BPL – Broadband over Power Lines

BTS – Basic Telecommunications Service

Btu – British thermal unit

CAIR – Clean Air Interstate Rule

CalWaRN – California Water/Wastewater Agency Response Network

CAMR – Clean Air Mercury Rule

CCT – Clean Coal Technology

CETCs - Competitive Eligible Telecommunications Carriers

CGA – Common Ground Alliance

CLEC – Competitive Local Exchange Carrier

CPCN – Certificate of Public Convenience and Necessity

CT – Combustion Turbine

CTA – Certificate of Territorial Authority

CWA – Communications Workers of America

DIMP – Distribution Integrity Management Program

DNR – Indiana Department of Natural Resources

DSA – Designated Service Area

DSIC – Distribution System Improvement Charge

DSL – Digital Subscriber Line

DVR – Digital Video Recorder

EEFC – Energy Efficiency Funding Component

EIA – Energy Information Administration
EPA – U.S. Environmental Protection Agency
EPAct – Energy Policy Act of 2005
ERO – Electric Reliability Organization
ETC – Eligible Telecommunications Carrier
FAC – Fuel Adjustment Clause
FCC – Federal Communications Commission
FERC- Federal Energy Regulatory Commission
FT – Firm Transportation
FTR – Financial Transmission Rights
FTTH – Fiber-to-the-Home
HEA – House Enrolled Act
ICTA – Indiana Cable Telecommunications Association
IDEM – Indiana Department of Environmental Management
IGCC – Integrated Gasification Combined Cycle
ILAP – Indiana Lifeline Assistance Program
ILEC – Incumbent Local Exchange Carrier
I&M – Indiana Michigan Power Company, subsidiary of AEP
IMP – Integrity Management Program
IMPA – Indiana Municipal Power Agency
INWARN – Indiana Water/Wastewater Agency Response Network
IOU – Investor-owned utility, financed by the sale of securities
IPTV – Internet Protocol Television
IPL – Indianapolis Power and Light
ISDH – Indiana State Department of Health
ISO – Independent System Operator
ISP – Internet Service Provider
IT – Interruptible Transportation
ITU – International Telecommunication Union
IUPPS – Indiana Underground Plant Protection Service
IURC – Indiana Utility Regulatory Commission

IUSF – Indiana Universal Service Fund
LDC – Local Distribution Company
LFA – Local Franchise Authority
LMG – Landfill Methane Gas
LMOP – Landfill Methane Outreach Program
LNG – Liquefied Natural Gas
Mcf – Million cubic feet
MGT – Midwestern Gas Transmission
Midwest ISO – Midwest Independent Transmission System Operator
MMBtu – One million British Thermal Units. Generally accepted as a rough equivalent of an Mcf.
MMcf – One million cubic feet
MMTCE – Million metric tons of carbon equivalent
MS4 – Municipal Separate Storm Sewer System
MSW – Municipal Solid Waste
MTEP – Midwest ISO Transmission Expansion Plan
MVPD – Multichannel Video Programming Distributor
MW – Megawatts
MWH – Megawatt Hour
NANPA – North American Numbering Plan Administrator
NAPSR – National Association of Pipeline Safety Representatives
NARUC – National Association of Regulatory Utility Commissioners
NCTA – National Cable and Telecommunications Association
NERC – North American Electric Reliability Council
NIPSCO – Northern Indiana Public Service Company
NOx – Nitrogen Oxides
NOAA – National Oceanic and Atmospheric Administration
NOPR – Notice of Proposed Rulemaking
NPDES – National Pollutant Discharge Elimination System
NPMS – National Pipeline Mapping System
NRRI – National Regulatory Research Institute

NTA – Normal Temperature Adjustment
OECD – Organization for Economic Cooperation and Development
OMS – Organization of Midwest ISO States
OPS – Office of Pipeline Safety
OQ – Operator Qualification
OUCC – Office of Utility Consumer Counselor
PHMSA - Pipeline Hazardous Materials Safety Administration
PIPES – Pipeline Integrity, Protection, Enforcement, and Safety
PJM – The PJM Interconnection
POLR – Provider of Last Resort
PPA – Purchase Power Agreement
PPTT – Purchased Power and Transmission Tracker
PSA – Pipeline Safety Adjustment
PSAPs – Public Safety Answering Points
PSI – PSI Energy
PSTN – Public Switched Telephone Network
PUHCA – Public Utility Holding Company Act of 1935
PUHCA 2005 – Public Utility Holding Company Act of 2005
PURPA – Public Utility Regulatory Policies Act of 1978
RFP – Request for proposals
RLECs – Rural Incumbent Local Exchange Carriers
RSD – Regional Sewer District
RSG – Revenue Sufficiency Guarantee
RTO – Regional Transmission Organization
SDC – System Development Charge
SIGECO – Southern Indiana Gas & Electric Company
SNG – Synthetic Natural Gas
SO₂ - Sulfur Dioxide
SOHO – Small Office Home Office
SRC – Sales Reconciliation Component
SUFGE – State Utility Forecasting Group

TA-96 – Telecommunications Act of 1996

UGS – Underground storage

UNEs – Unbundled Network Elements

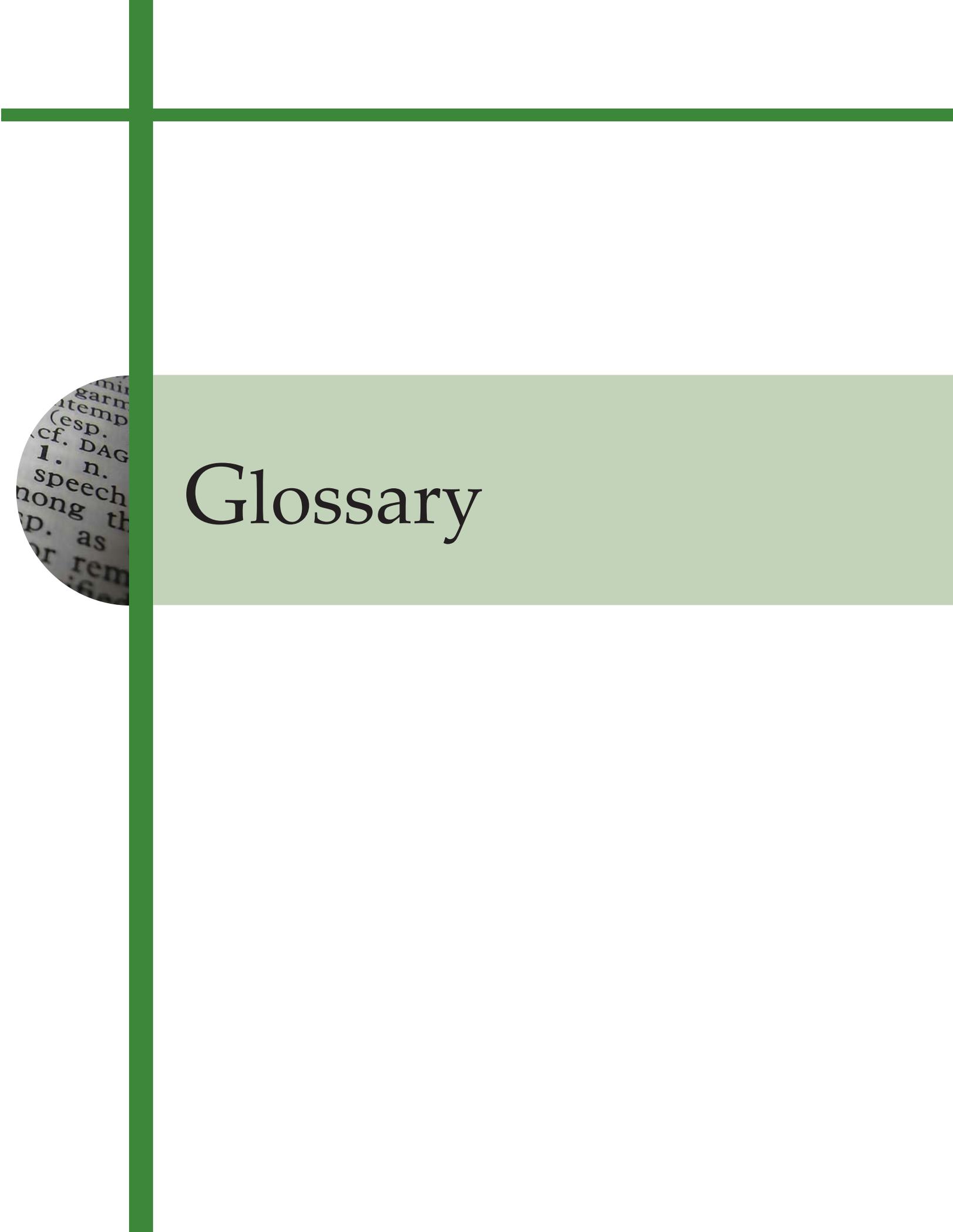
USAC – Universal Service Administrative Company

USF – Universal Service Fund

VoIP – Voice over Internet Protocol

Wi-Fi – Wireless Fidelity

Wi-Max – Worldwide Interoperability for Microwave Access

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Glossary

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GLOSSARY:

Access Charges: Charges designed to compensate local exchange carriers for the maintenance and operation of the local exchange network after the break up AT&T in 1984 in the Modified Final Judgment and take two forms: 1) an end user access charge, also known as Subscriber Line Charge appears on the customer's bill as a separate line item; 2) carrier access charges are paid by interexchange carriers to local exchange carriers when they connect to their local networks. Such charges are determined by tariffs subject to state or federal approval depending upon the intrastate or interstate nature of the call.

Affiliate: A company, partnership or other entity with a corporate structure that includes a utility engaging in or arranging for an unregulated retail sale of gas or electric energy or related services.

Alternative Fuels: Any non-traditional energy source.

Alternate Ratemaking for Pipelines: In a series of orders in February 1996, FERC opened the door to non-cost-based rates for pipeline services, including transmission and storage, provided a pipeline (1) could show it did not have market power or that the power was mitigated and (2) cost-based recourse rates were available for customers who might be disadvantaged under the new system. Pipelines would have to show the quality of service was maintained and that market-based, incentive or negotiated rates did not shift costs to captive customers.

Alternative Operator Service (AOS): Carriers that provide operator services typically consist of a call center, but do not necessarily have their own facilities. AOS providers often provide operator services for payphones and inmate facilities.

American Gas Association (AGA): Trade group representing natural gas distributors and pipelines. Also operates a laboratory for appliance certification. Web address: www.aga.org

Aquifer: Water bearing permeable rock formation that is capable of storing natural gas.

Area Code Overlay: A method used to relieve area code exhaust. A new three-digit area code is associated with the same geographic boundaries of an existing area code. Because the same seven-digit telephone numbers could then be assigned out of each area code, local calls are required to be dialed with 10-digits.

Area Code Split: A method used to relieve area code exhaust. The geographic area that uses the area code is split in two and a different area code is assigned to part of the geographic area while the other area keeps the existing area code.

Asynchronous Digital Subscriber Line (ADSL): A DSL designed to deliver more bandwidth downstream (from the central office to the customer's site) than upstream. Downstream rates range from 1.5 to 9 million bits per second. See also Digital Subscriber Line.

Base Gas: Gas required in storage pool to maintain sufficient pressure to keep the working gas recoverable. Also called "cushion" gas.

Basic Telecommunications Service: A term used in HEA 1279 to distinguish between telecommunication services regulated until June 30, 2009 and services that were unregulated on or before March 27, 2006. Basic Telecommunications Service is defined as stand alone telephone exchange service that is provided to a residential customer through the customer's primary line; is the sole service purchased by the customer; is not a part of a package, promotion, or contract; and, not otherwise offered at a discounted price.

British Thermal Unit (Btu): The quantity of heat required to raise one pound of water (about one pint) one degree Fahrenheit at or near its point of maximum density. A common unit of measurement for gas prices. 1,034 Btu's = 1 cubic foot.

Broadband: Advanced communications systems capable of providing high-speed transmission of services such as data, voice, and video over the Internet and other networks. Transmission is provided by a wide range of technologies, including digital subscriber line and fiber optic cable, coaxial cable, wireless technology, and satellite.

Broadband platforms make possible the convergence of voice, video and data services onto a single network.

Bundled Resale of Local Exchange: Competitive local exchange carriers sometimes compete by reselling the services of the incumbent local exchange carrier (ILEC) in this form. They purchase the services of the ILEC at wholesale rates hoping to resell them to retail customers at a profit. Each of Indiana's three large ILECs offer wholesale discounts to competitive carriers.

Bundled Service: Gas utility operates as both the supplier and distributor of natural gas.

Capacity: The size of a plant (not its output). Electric utilities measure size in kilowatts or megawatts and gas utilities measure size in cubic feet of delivery capability.

Certificate of Public Convenience and Necessity: A special permit commonly issued by a state commission, which authorizes a utility to engage in business, construct facilities or perform some other service. Also a permit issued by Federal Energy Regulatory Commission to engage in the transportation or sale for resale of natural gas in interstate commerce or to construct or acquire and operate any facilities necessary.

City Gate: The physical location where gas is delivered by a pipeline to a local distribution company.

Coal Gasification: The controlled process of placing coal, steam, and oxygen under pressure to produce a low Btu gas.

Commodity Charge: The variable costs associated with the movement of each Mcf of gas and in Straight Fixed Variable rate design; covers the pipeline's variable costs. Also referred to as usage charge.

Communications Service Provider: A term used in HEA 1279 that means a person or entity that offers communications services to customers in Indiana, without regard to the technology or medium used by the person or entity to provide the communications service.

Conditional Congestion Area: As designated by the U.S. Department of Energy, areas where electric utilities have planned generation and, while there is some transmission congestion present, significant congestion would result if transmission is not built in conjunction with the new generation resources.

Cooperative: A business entity similar to a corporation, except that ownership is vested in members rather than stockholders and benefits are in the form of products or services rather than profits.

Cost of Service Rates: Rates based on prudently incurred costs of doing business, plus a reasonable rate of return on investment in plant and equipment, and throughput projections. This is the rate development methodology commonly used by state or federal regulators.

Cramming: A practice in which customers are billed for unexpected and unauthorized telephone charges or services. Refers to the fact that the charges are crammed into the telephone bill in an inconspicuous place so the charges go unnoticed by the customer.

Customer Charge: A fixed amount to be paid periodically by a customer without regard to demand or energy actually used. The customer charge recovers the cost of meters and other administrative costs of billing.

Decoupling: Alternative rate design theory that separates the recovery of a utility's fixed costs from the volume of natural gas sold.

Dekatherm (Dth): A unit of heating value equal to 10 Therms or one million Btu's (1MMBtu). Very roughly, 1 Mcf = 1MMBtu = 1 Dth

Demand Response: Reducing the use of electricity to meet local or regional power system needs rather than increasing the output of electricity.

Digital Subscriber Line (DSL): A generic term for digital lines provided by incumbent or competitive local exchange carriers which allows the customer to use the same subscriber line for voice and data simultaneously without subscribing to a second line for Internet access.

Distribution: The component of a gas, electric or water system that delivers gas, electricity, or water from the transmission component of the system to the end-user. Usually the commodity has been altered from a high pressure or voltage level at the transmission level to a level that is usable by the consumer. Distribution is also used to describe the facilities used in this process.

Distribution System Improvement Charge: A mechanism available to water utilities to pass the costs of infrastructure replacement on to their customers between rate cases on a more expedited basis.

Effluent: The water that is discharged after being treated at a sewage plant.

Eligible Telecommunications Carrier (ETC): A common carrier eligible to receive universal service support. An ETC is required to offer services that are supported by the Federal universal support mechanisms either using their own facilities or a combination of its own facilities and resale of another carrier's services. State commissions are responsible for the designation of ETCs.

End Use: The final use to which gas or electricity is put by the ultimate consumer.

Energy Information Administration: Statistical information collection and analysis branch of the Department of Energy. Web address: <http://www.eia.doe.gov/eia.doe.gov>

Energy Policy Act of 1992: This act authorized the Federal Energy Regulatory Commission to order wholesale wheeling of electricity while explicitly restraining its power to order retail wheeling. The Act also created a new legal category of electricity generating and sales companies called the Exempt Wholesale Generators, free from Public Utility Holding Company Act of 1935 restrictions.

Energy Policy Act of 2005: Major provisions regarding the electricity industry included the creation of the Public Utility Holding Company Act of 2005, clean coal, nuclear, wind, and alternative energy initiatives, establishment of an Electric Reliability Organization, incentive rates for transmission investment, transmission siting, smart metering, net metering, utility interconnection with distributed generation, increased

efficiency of fossil-fuel power plants, and the increased diversity of fuel sources to generate electricity.

Energy Protection Agency: A federal agency created in 1970 to combine into one agency a number of federal research, monitoring, standard setting and enforcement actions related to protecting the environment. Web address www.epa.gov

Facilities-based Interexchange: A carrier that offers facilities-based interexchange deploys their own tandems and/or trunks as opposed to purchasing blocks of time from other interexchange carriers and reselling the services to retail customers.

Facilities-based Local Exchange: A carrier that offers facilities-based local exchange may construct and deploy their own networks or they may rely on unbundled network elements (UNEs) from incumbent local exchange carriers or a combination of the two.

Federal Energy Regulatory Commission (FERC): The U.S. federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, and oil pipeline rates. FERC also authorizes liquefied natural gas terminals, interstate natural gas pipelines and non-federal hydropower projects.

FiOS: Verizon's broadband initiative featuring fiber to the premise currently is being deployed in several areas throughout the U.S.

Firm Service: The highest quality sales or transmission service that is offered to customers under a filed rate schedule that anticipates no planned interruption.

Fixed Costs: All costs included in the cost of service which do not fluctuate with the volume of the commodity passing through the system (i.e., labor, maintenance, and taxes).

Gigabit: A unit of measurement for the amount of data that is transferred in a second between two telecommunication points. One gigabit per second (Gbps) equals one billion bps.

Gathering System: Pipelines and other equipment installed to collect, process, and deliver natural gas from the field, where it is produced, to the trunk or main transmission lines of pipeline systems.

Generation: The process of producing electricity. Also refers to the assets used to produce electricity for transmission and distribution.

Heartland: Heartland Gas Pipeline, LLC

Hedging: A method by which a purchaser or producer of natural gas or electricity uses a derivative position to protect against adverse price movements in the cash market by “locking in” a price for future delivery.

Holding Company: A corporate structure where one company holds the stock (ownership) of one or more other companies but does not directly engage in the operation of any of its business.

Hub: A geographic location where multiple participants trade services.

Indiana Lifeline Assistance Program (ILAP): A State program required in HEA 1279 for the purpose of offering reduced charges for basic telecommunications services to eligible customers (customers with income that falls within 150 percent of the Federal Poverty Guidelines or participates in certain assistance programs, such as Medicaid, food stamps, etc). HEA 1279 requires the Commission to adopt rules for the program no later than July 1, 2008 and the program must take effect no later than July 1, 2009.

Independent System Operator (ISO): An independent organization or institution that controls the electric transmission system in a particular region.

Indiana Utility Regulatory Commission: An independent fact-finding body that hears evidence in cases filed before it and makes decisions based on the evidence presented in those cases. An advocate of neither the public nor the utilities, the Commission is required by state statute to make decisions that balance the interests of all parties to ensure the utilities provide adequate and reliable service at reasonable prices.

Integrated Gasification Combined Cycle (IGCC): A power plant using synthetic gas as a source of clean fuel. Syngas is produced from coal (or other fuels) in a gasification unit. Steam generated by waste heat boilers of the gasification process is utilized to help power steam turbines.

Internet Protocol Television (IPTV): A system where a digital television service is delivered by using Internet Protocol over a network infrastructure, which may include delivery by a broadband connection.

Interruptible Service: Gas service subject to interruption at the option of the pipeline. Also referred to as “best efforts.” Tariffs for interruptible service are cheaper than firm service. Electric providers may offer a similar service.

Interruptible Transportation Service: Conditional gas service interrupted at the option of the pipeline. Also, referred to as “best efforts.” Tariffs for interruptible service are cheaper than firm service. Electric providers may offer a similar service.

Interstate Gas: Gas transported through interstate pipelines to be sold and consumed in states other than the one in which it was produced. Also, refers to gas produced in the federal domain of the Outer Continental Shelf.

Intrastate Gas: Gas sold and consumed in the state in which it was produced and not transported in interstate pipelines

Joint Board: Also known as the Federal-State Joint Board, instituted by the Federal Communications Commission to recommend changes of any of its regulations in order to implement section 214(e) of the Telecommunications Act of 1996, including the definition of services that are supported by the Federal universal service support mechanisms.

Kilobit: A unit of measurement for the amount of data that is transferred in a second between two telecommunication points. One kilobit per second (Kbps) equals 1000 bit per second (bps).

Kilowatt (kW): A basic unit of measurement; 1kW = 1,000 watts.

Kilowatt-Hour (kWh): One kilowatt of power supplied to or taken from an electric circuit steadily for one hour.

Liquefied Natural Gas (LNG): Natural gas converted to a liquid state by pressure and severe cooling, and then returned to a gaseous state to be used as a fuel. It is stored by many distributors for peak season use.

Mandatory Number Pooling: Requires carriers to share a pool of numbers with the same exchange. Without number pooling each competitive local exchange carrier is assigned an entire exchange or 10,000 block of phone numbers, which may not all be needed. With number pooling exchanges can be broken down into blocks of 1,000, as known as Thousand Block Number Pooling.

Megabit: A unit of measurement for the amount of data that is transferred in a second between two telecommunication points. One megabit per second (Mbps) equals one million bps.

Megawatt (MW): One thousand kilowatts or one million watts.

Megawatt-Hour (MWh): One megawatt of power supplied to or taken from an electric circuit steadily for one hour.

Merchant Plant: A power plant that is funded by investors and sells electricity in the competitive wholesale market.

Mine Mouth Power Plant: An electric power plant located at a coal mine to provide a reliable supply of fuel with little or no associated transportation costs.

Midwest ISO: The Midwest ISO was formed by transmission owners in 1996, and is based in Carmel, Indiana. The Midwest ISO's main responsibility is to ensure the safe and reliable transfer of electricity in the Midwest and ensure fair access to the transmission system.

Multi-Association Group Order (MAG Order): A Federal Communications Commission Report and Order adopted October, 2001 which prescribed access charge reform measures that affected small, rural incumbent local exchange carriers.

Municipal Utility: A utility that is owned and operated by a municipal government. These utilities are organized as nonprofit local government agencies and pay no taxes or dividends; they raise capital through the issuance of tax-free bonds.

National Interest Electric Transmission Corridor: As established in the Energy Policy Act of 2005, any geographic area experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers.

Normal Temperature Adjustment (NTA): A decoupling mechanism that reduces the risk of the gas utility not recovering margin due to warmer-than-normal (vice versa) during the heating season.

Order 436: A Federal Energy Regulatory Commission rule promulgated in October 1985, establishing a voluntary, open-access system of natural gas transportation.

Order 500: An interim natural gas rule on open-access transportation, replacing Order 436. Order 500 embodied all the elements of Order 436 with three additions: forcing producers to credit transportation volumes against accruing take-or-pay (cross-crediting); allowing pipelines to direct bill customers for part of past take-or-pay charges; and allowing pipelines to fashion gas inventory charges (or supply reservation fees) to take care of future take-or-pay.

Organization of Midwest ISO States (OMS): A group of state utility commissions in the Midwest ISO footprint that acts as an adviser on some Midwest ISO functions.

Peak Shaving: Supply of fuel gas for distribution systems from an auxiliary source (of limited supply, higher cost) during periods of maximum demand when the primary source is not adequate, e.g., propane, liquefied natural gas. Electricity providers may also use peak shaving to reduce demand at peak periods. Service interruptions and customer-owned generation are methods electricity providers use for peak shaving.

PJM Interconnection: The PJM Interconnection is the regional transmission organization (RTO) responsible for the operation and control of the bulk power system throughout all or portions of Delaware, Indiana, Illinois, Kentucky, Maryland, Michigan, New Jersey, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. PJM became the first fully functioning RTO in 1997.

Point-to-Point Transmission: The reservation and/or transmission of electricity on either a firm basis and/or a non-firm basis from point(s) of receipt to points(s) of delivery, under a tariff, including any ancillary services that are provided by the transmission provider.

Project Lightspeed: AT&T's broadband initiative to deploy fiber to the node and deliver voice, video and data services to 18 million households across 13 states by the end of 2007

Public Utility Holding Company Act of 1935 (PUHCA): A federal law to facilitate regulation of electric utilities, by either limiting their operations to a single state, and thus subjecting them to effective state regulation, or forcing divestitures so that each became a single integrated system servicing a limited geographic area. Another purpose of PUHCA was to keep utility holding companies engaged in regulated businesses from engaging in unregulated businesses. PUHCA required Securities and Exchange Commission approval prior to a holding company engaging in a non-utility business and that such businesses be kept separate from the regulated business. PUHCA was repealed by the Energy Policy Act of 2005, and replaced by what is known as the Public Utility Holding Company Act of 2005.

Public Utility Regulatory Policies Act (PURPA): A federal law passed in 1978 as part of the National Energy Act. It was meant to promote greater use of renewable energy. Implementation of the act was left to the states. PURPA was amended in 2005 by the Energy Policy Act of 2005 sections 1251 through 1254.

Pulverized Coal: Coal that is ground into dust using a powdered coal mill and used as the fuel in a power plant to generate electricity.

Purchasing Cooperative: A type of cooperative arrangement, often among businesses, to agree to aggregate demand to get lower prices from selected suppliers.

Quadruple Play: A service bundle that includes high speed data, telephony, television and wireless communications services.

Rate Base: The investment value established by a regulatory authority upon which a utility is permitted to earn a specified rate of return.

Rate Design: The method of classifying fixed and variable costs between demand and commodity components.

Rate of Return: The percentage that a company earns on its investment.

Reliability: A term used in both the electric and gas industry to describe the utility's ability to provide uninterrupted service of gas or electricity. Reliability of service can be compromised at any level of service: generation or production, transmission or distribution.

Service Territory: Under the current regulatory environment, an electric utility is granted a franchise to provide energy to a specified geographical territory, designated as a service territory.

Slamming: The practice of switching a telephone customer's long distance or local service provider without obtaining permission from the customer.

Small Utility Filing: A process where a utility that serves less than 5,000 customers and does not extensively serve another utility can increase rates without a formal public hearing.

Spot Market: A market characterized by short-term, typically interruptible, or best efforts contracts for specified volumes. The bulk of natural gas spot market trades on a monthly basis, while power marketers sell spot supplies on an hourly basis.

Storage: Facilities used to store natural gas that transferred from its original location. Usually consists of natural geological reservoirs like depleted oil or gas fields, water-bearing sands sealed on top by impermeable cap rock, underground salt domes, bedded salt formations or, in rare cases, abandoned mines.

Straight-Fixed Variable (SFV) Rate Design: (Also called Fixed Variable.) Rate design methodology that allocates all fixed costs to the demand component and allocates all variable costs to the commodity, or volumetric, component.

Supply Side Management: The systematic development of a gas supply plan or an electric resource plan.

Synthetic Natural Gas: Energy-rich vapors manufactured from coal.

System Development Charge: A one-time charge assessed to new customers to finance development of utility systems necessary to serve those new customers. The purpose is to impose a portion of the cost of capital improvements upon those developments that create the need for, or increase demand for capital improvements. These charges are typically assessed by water and wastewater utilities.

Sub-metering/Sub-billing: The practice where a consumer of utility service, usually an apartment complex or a mobile home park, passes along the cost of water or electric service to the tenants of the complex or park through a separate utility bill.

Take-and-Pay: Clause that requires a minimum quantity of natural gas to be physically taken and paid for, usually in association with oil, or wells, that will be damaged by failure to produce.

Tariff: Compilation of all effective rate schedules for a company, along with general terms and conditions of service.

Therm: Unit of heating value equivalent to 100,000 Btus.

Transmission: The process of transferring energy (either gas or electricity) or water from the production or generation source to the point of distribution. Also refers to the facilities used for this process.

Triple Play: A service bundle that includes telephony, high-speed Internet access and television.

Unaccounted for Gas: The difference between the total gas available from all sources and the total gas accounted for as sales, net interchange, and company use. This difference includes leakage or other actual losses, discrepancies due to meter inaccuracies, variations of temperature and/or pressure, and other variants, particularly billing lag.

Unbundled Network Elements (UNEs): The Telecommunications Act of 1996 required that independent local exchange carriers unbundled their network elements to make them available to competitive local exchange carriers on the basis of incremental costs.

Universal Service: A policy to keep local rates low and encourage every household to have a telephone.

Unserved Energy: Electricity demand that the utility is unable to supply. In the electric utility planning process, unserved energy helps identify when and what type of new resources may be needed in the future.

Volatility: The market's price and movement within that range. The direction of the price move, whether up or down, is not relevant. Historic volatility indicates how much prices have changed in the past and is derived by using daily settlement prices for futures. Implied volatility measures how much the market thinks prices will change in the future, obtained from daily settlement prices for options.

Voltage: The rate at which energy is drawn from a source that produces a flow of electricity in a circuit; expressed in volts.

Voice over Internet Protocol (VoIP): Technology used to transmit voice conversations over a data network using the Internet Protocol. Such data network may be the Internet or a corporate Intranet.

Weatherization: Any change made to a home or building that is designed to conserve energy.

Wireless Fidelity (Wi-Fi): Wi-Fi was originally a brand licensed by the Wi-Fi Alliance to describe the embedded technology of wireless local area networks (WLAN) based on the IEEE 802.11 standard. As of 2007, common use of the term Wi-Fi has broadened to describe the generic wireless interface of mobile computing devices, such as laptops in local area networks.

Worldwide Interoperability for Microwave Access (Wi-Max): Wi-Max is a telecommunications technology aimed at providing wireless data over long distances in a variety of ways, from point-to-point links to full mobile cellular type access. Wi-MAX allows a user, for example, to browse the Internet on a laptop computer without physically connecting the laptop to a wall jack.