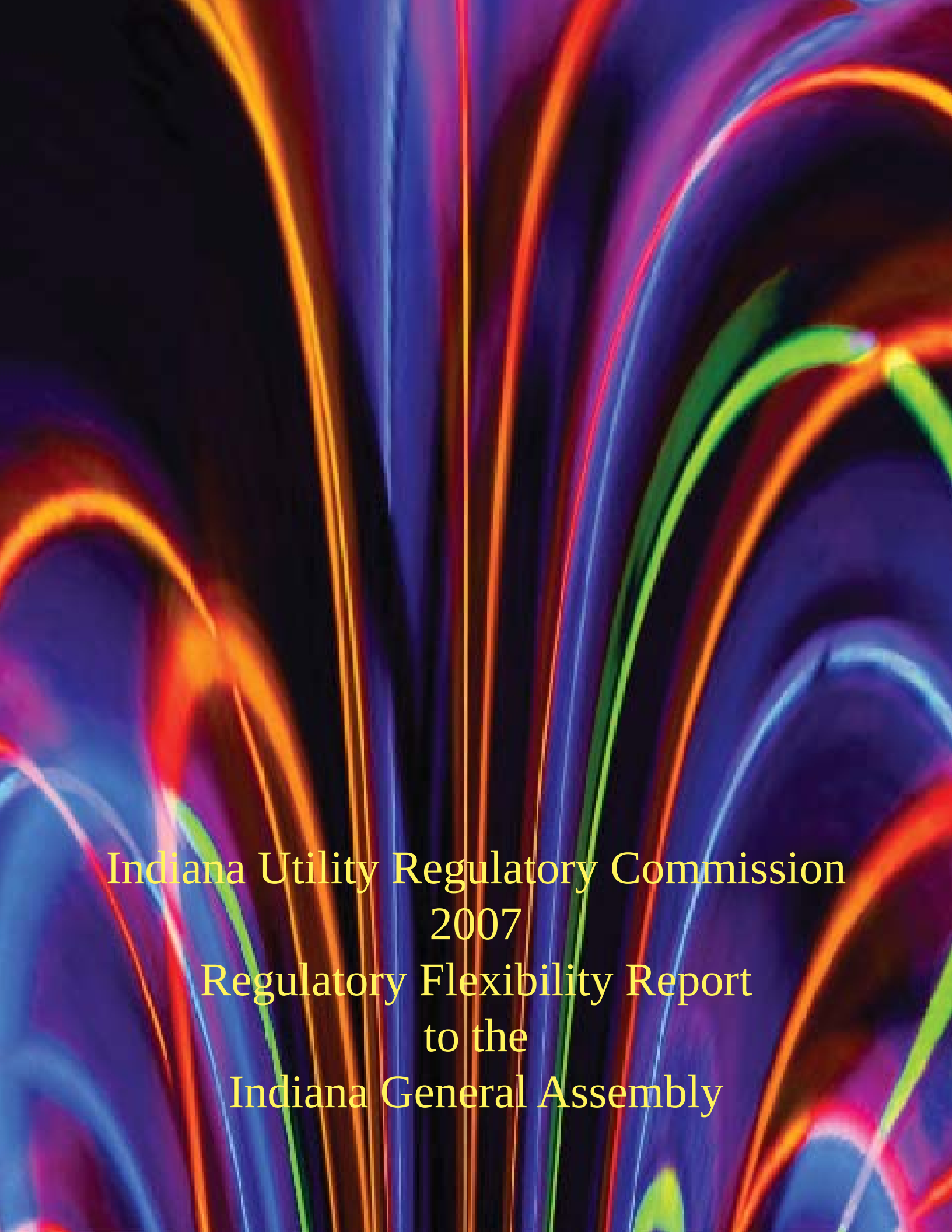

Indiana Utility Regulatory Commission
2007
Regulatory Flexibility Report
to the
Indiana General Assembly

Links to Major Sections of the Regulatory Flexibility Report

Click on Links Below to Navigate to Major Sections of the Regulatory Flexibility Report

- Executive Summary
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Executive Summary

EXECUTIVE SUMMARY

This 2007 Indiana Utility Regulatory Commission Report to the Regulatory Flexibility Committee of the Indiana General Assembly highlights key issues that confront Indiana Electric, Gas, Communications, and Water/Wastewater industries, as well as the role of the Indiana Utility Regulatory Commission (IURC, Commission) in addressing these issues. For the first time, and while not required by statute, a section on the Water/Wastewater industry is included in this Report in response to concerns raised during the most recent session of the legislature. While each industry has unique issues, several issues discussed in this Report cut across multiple industries. 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. For your convenience there is a list of acronyms and a glossary in the back of the Report.

CROSS-INDUSTRY ISSUES

Aging infrastructure is a concern for many Indiana utilities. The Electric, 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, gas, telecommunications, and water services. Increased consumer demand can accelerate the deterioration of equipment and limit periods in which facilities can be conveniently removed from service for maintenance or replacement. Obsolescence is an additional concern for the telecommunications industry as many carriers are replacing copper plant with fiber-optic and coaxial cable facilities.

Also at issue is the use of adjustable rate mechanisms (trackers). Indiana's regulatory statutes include trackers as an integral part of regulation. The electric industry utilizes statutorily authorized trackers to recover fuel costs and to recover pre-approved capital expenditures associated with the installation of environmental compliance equipment. Natural gas utilities employ statutory trackers to recoup the commodity cost of natural gas. The water industry has utilized a specific statutory tracker to recover costs

associated with the repair or replacement of distribution plant. While trackers help protect utility earnings and provide financial stability based on the timely recovery of certain expenses, as these costs are passed through to customers, there is the risk that utilities may become indifferent to rising costs. It is the Commission's job in tracker proceedings to assure appropriate oversight of requests for cost recovery.

Additionally, in order for the Commission to fulfill its regulatory responsibilities, it must be able to access utility information. While this is generally not an issue with respect to gas, electric and water/wastewater utilities, the Commission has been rebuffed in its efforts to collect information from various telecommunications and video service providers while attempting to fulfill its statutory mandates under House Enrolled Act 1279 (HEA 1279).

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, 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. The Commission has a long-standing practice of encouraging utilities to investigate cost-effective and innovative conservation and efficiency measures.

The recent development of ethanol plants in the state raises new resource issues. Although ethanol plants provide benefits to the transportation fuels sector and Indiana's economy, these plants use significant amounts of natural gas and water resources. Telecommunications also has conservation issues regarding telephone numbers and area codes. Due to industry collaboration the Commission has been able to delay the exhaustion of area codes which has benefited consumers.

A final issue that is primarily associated with the communications industry, but could have secondary affects in the electric industry, is the expansion of communications services to geographic areas without access to broadband service. The expansion of

broadband facilities to these areas may also allow electric, gas, and water utilities to use these same facilities to improve the reliability of service.

ELECTRICITY

For the past decade, Indiana has consistently ranked as one of the lowest cost states for providing electricity to its citizens. As of April 2007, Indiana electricity rates ranked 11th lowest in the nation. While Indiana's ranking relative to other states may not change significantly over time, it seems certain that the overall cost of electricity in Indiana, as elsewhere, will continue to rise – perhaps significantly.

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

- Increasing demand for electricity;
- Construction of new generation plants;
- Additional environmental regulations, including the Clean Air Interstate Rule (CAIR), the Clean Air Mercury Rule (CAMR), and the potential regulation of carbon dioxide (CO_2);
- Aging infrastructure;
- Continuing fuel and transportation cost increases; and
- Increasing construction and financing costs.

The State Utility Forecasting Group's most recent forecast shows that Indiana's demand for electricity is growing at 2.2% annually.[1] As a result, Indiana will need approximately 6,100 MWs of additional generation by 2015 to reliably meet the needs of Indiana consumers. Since 2004, the IURC has approved approximately 600 MWs of new generation. Requests to construct an additional 700 MWs of generation are presently under review by the Commission in various proceedings.

Along with the need for new generation to meet consumer demand, aging existing generation facilities may need to be replaced or refurbished in the near future. Many of the generation plants currently operating in Indiana are 40 years old or older.

[1] Indiana Electricity Projections 2005, State Utility Forecasting Group, p. 1.1.

The implementation of CAIR and CAMR will continue over the next several years. Indiana utilities' estimated capital costs for complying with CAIR and CAMR exceed $1.3 billion, with associated annual operating costs of approximately $42 million. In addition, electric utilities may eventually become subject to environmental regulation of carbon dioxide or renewable portfolio standards which could have ramifications on the future price of electricity.

Electric utilities in Indiana, along with those in other states, are currently undertaking the construction of new generation and the installation of environmental compliance equipment. 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. A state's regulatory environment is one component that helps determine a utility's credit rating.

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 a 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 proceedings for this purpose. Fuel costs, including transportation, are an example of expenses that are commonly tracked by electric utilities. Increasing demand for electricity and fuel switching strategies to meet environmental regulation contribute to increasing fuel costs. A utility's ability to track certain costs helps support its earnings and is viewed favorably by credit rating agencies.

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

- Planning – Utility planning and regional planning by regional transmission organizations;
- Demand response – Advanced metering and time based rates;
- Regional transmission organizations – Benefits and challenges;

- Federal legislation – Energy Policy Act of 2005 directives and National Interest Electric Transmission Corridors;
- Regulation effectiveness – Complex holding company structures; and
- Renewable portfolio standards.

NATURAL GAS

During the 2006-2007 winter heating season, the demand for natural gas was lower than the 2005-2006 heating season. This was due mainly to warmer weather. Warmer winter temperatures for most of 2006 resulted in reduced demand for gas and an increase in the amount of gas that was available for storage during the non-winter months. This combination of reduced demand and increased storage contributed to lower overall gas prices. The absence of significant hurricane activity and other disruptions also had a moderating effect on the price of natural gas. The lower gas prices were, however, offset to some degree by the increased demand for electricity. The hotter than normal summer resulted in greater demand for gas-fired generation and the first net withdrawals of natural gas from storage during the summer months. Despite the slight increase in the utilization of gas for the generation of electricity, there was an overall decline in consumption of natural gas across all sectors (residential, commercial, and industrial). [2]

The balance of demand and supply remains relatively tight, which will tend to create price volatility in the market. Although new technologies and conservation efforts will reduce demand and moderate some upward price pressure, 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 which are fully discussed in the Natural Gas Report. Nonetheless, the single factor most affecting the price of natural gas is weather.

The Natural Gas Report focuses on a number of key issues in the gas industry. These issues include:

[2] Energy Information Administration, Office of Oil and Gas, "Natural Gas Year-In-Review 2006", March 2007.

- Decoupling - The Commission is implementing decoupling as a new regulatory mechanism, and is continuing to study its impact on utilities and customers;
- Gas pipeline infrastructure - Indiana's gas pipeline infrastructure is expanding, with construction of both an intrastate pipeline (Heartland Gas) and an interstate pipeline (Rockies Express);
- Adjustable rate mechanisms - The utilities can utilize a variety of adjustable rate mechanisms (trackers);
- Liquefied Natural Gas (LNG) – LNG is an option to store gas and mitigate price volatility;
- Ethanol plants - New ethanol plants will likely increase gas usage; and
- New guidelines - In response to legislation, the Commission's Pipeline Safety Division developed voluntary construction guidelines for all pipeline companies.

COMMUNICATIONS

HEA 1279 declared that there is full and fair competition in the telecommunications market in Indiana and stated that "after March 27, 2006 the commission shall not exercise jurisdiction over any non-basic telecommunications service." HEA 1279 resulted in significant changes to telecommunications regulation, and added new jurisdictional responsibilities over video services. The statute envisioned a dynamic competitive environment driven by technological growth and innovation. This legislative objective is currently most evident in the broadband market, whereas competition in the video market has been slower to emerge. Legislative directives in HEA 1279 require the Commission to monitor these changes and report on progress as it develops.

HEA 1279 virtually eliminated telecommunications regulation in Indiana, except for basic telecommunications service. Basic service is defined as "stand alone telephone exchange service" and is not a part of any package (e.g., caller ID), promotion, or contract; and is not offered at a discount price. Part of the Commission's new role under HEA 1279 includes monitoring, tracking, and reporting to the General Assembly various competitive and pricing trends across different segments of the communications market.

One of the primary goals of the General Assembly and the Governor was to increase the availability of affordable broadband services. Broadband provides new communications services, enables competition in communications services, provides video services, and can be used by other utilities for direct communication with their customers. According to data received from the Federal Communications Commission (FCC), Indiana's broadband connection speeds are higher than the average of all U.S. broadband connections. While broadband availability is not yet ubiquitous in Indiana, access is improving.

The enactment of HEA 1279 also offered Indiana consumers the promise of improved product offerings and lower prices brought about through increased competition in video services. The IURC has issued 31 video franchises since July 1, 2006. Even though most franchises have gone to existing video service providers, new providers are slowly beginning to offer services. Prior to the passage of HEA 1279, head-to-head competition in video services was limited to a few areas, including Evansville, Hancock County, and a few small towns across the state. As new providers receive their state-issued video franchise authority, the Commission is hopeful that further direct competition will emerge throughout the state.

The Commission is also engaged in other aspects of implementation associated with HEA 1279. This includes the Indiana Lifeline Assistance Program. Data from the FCC indicates that the percentage of the population with a telephone in Indiana has fallen since the passage of the Telecommunications Act of 1996. As a result, Indiana's telephone penetration rate of 91.6% is currently lower than the national average of 94.6%.

Although there have been several notable changes in telecommunications regulations after the passage of HEA 1279, the following remain subject to regulation:

- Universal service and other federal responsibilities;
- Slamming and cramming;
- Numbering/number conservation and area code relief;
- Public safety (911 issues) and other dialing codes;
- Carrier-to-carrier dispute resolution, and

- Payphone matters.

These topics and other related issues are covered in more detail in the body of the Communications Report.

WATER/WASTEWATER

From a regulatory perspective, Indiana's water and wastewater utilities are perhaps best characterized by considerable diversity in size and scope of regulation. For example, the largest regulated water utility serves more than a quarter of a million customers, while the smallest serves only 16 customers. Further, of the approximately 800 water systems identified by the Indiana Department of Environmental Management, only 125 are regulated by the IURC. And while small investor-owned and not-for-profit sewer utilities are regulated by the Commission, municipal wastewater providers are not.

The Water/Wastewater Report focuses on the following key issues:

- Infrastructure investment - Water/wastewater utilities must increase infrastructure investments;
- Territorial disputes – Territorial disputes, which can be costly to ratepayers, are exacerbated by the current shortage of water in some areas; and
- Troubled utilities - Indiana continues to be burdened by a few small, troubled utilities that present regulatory challenges and opportunities.


Electricity Report

2007 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), some cooperatives, and some 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). Rural electric membership cooperatives (REMCs) and individual municipal electric utilities are not required to obtain prior approval for financing, although the Commission indirectly reviews financing via rate cases. Under Indiana Code § 8-1.5-3-9 and I.C. § 8-1-13-18.5 municipal and cooperative utilities, respectively, may remove themselves from the Commission's jurisdiction. To date, 60 municipal electric and 39 cooperatives have withdrawn.

The IURC has jurisdiction over electric service to over 2.6 million electric customers in Indiana. As of April 2007, Indiana's average residential rates are the 11th lowest in the nation.

Indiana consumers receive electric service from Indiana's 117 electric utilities. The Commission regulates 25 of these utilities which have in excess of 2.6 million electric customers and generated more than $7.2 billion in revenue last year. As of April 2007, Indiana's average residential rates are the 11th lowest in the nation[1], as compared to 18th lowest for the same 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 rank as follows: Kentucky 7th, Ohio 25th, Illinois 33rd, and Michigan 34th.[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 April 2007.
[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, meaning 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 2006 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 (IPL), a subsidiary of The AES Corporation; and
- Southern Indiana Gas & Electric Company (SIGECO), a subsidiary of Vectren Corp.

As of July 2007, 16 of the 72 municipally owned utilities operating in Indiana remain under Commission jurisdiction for rate regulation. Furthermore, 50 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 power from other sources. IMPA meets its 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 2007, 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 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 their decision to purchase, build or lease generation facilities; and long-term financing with respect to WVPA.

Credit Rating

Indiana utilities require external financing for projects necessary to meet forecasted electric demand needs and to comply with environmental regulations. Therefore 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 an agency's (S&P, Moody's or Fitch) opinion of the general creditworthiness of a company, or the creditworthiness of a company with respect to a particular debt security or other financial obligation, based on consideration of relevant risk factors. A ratings analysis considers both qualitative and quantitative factors when assessing the financial and business risk of Indiana utilities.

Important qualitative factors for credit ratings include: 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 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 the state's statutes and the manner in which the Commission applies them.

Specific issues analyzed in an assessment of 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.

A utility with a mid-quality or better investment-grade credit rating is able to raise debt capital at a reasonable cost to fund the infrastructure necessary to meet growth. All 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. 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%.

II. CHANGES IN THE ELECTRIC INDUSTRY

Environmental Legislation

Background

In 2005-06, environmental rules were adopted by the U.S. Environmental Protection Agency (EPA). The two major new rules with which Indiana utilities must comply are the Clean Air Interstate Rule and the Clean Air Mercury Rule. Legislation involving carbon dioxide emission limits is currently being debated in Congress. Such legislation, if passed, would have significant implications for Indiana's utilities and ratepayers. Table 1 shows the projected total capital costs of Indiana IOUs to comply with existing environmental regulations.

Clean Air Interstate Rule (CAIR)

On March 10, 2005, the EPA announced the Clean Air Interstate Rule, which mandates reductions in sulfur dioxide (SO_2) and nitrogen oxides (NOx) emissions in order to help over 450 counties in the eastern U.S. meet EPA's protective air quality standards for ozone or fine particles. SO_2 emissions contribute to the formation of fine particles, while NOx emissions contribute to the formation of fine particles and ground-level ozone.

Clean Air Mercury Rule (CAMR)

On March 15, 2005, the EPA issued the Clean Air Mercury Rule, the first federal rule to permanently cap and reduce mercury emissions from coal-fired power plants. The CAMR establishes "standards of performance" limiting mercury emissions from new and existing coal-fired power plants and creates a market-based cap and trade program that will reduce emissions in two phases. Phase I reductions will be substantially or wholly achieved through "co-benefits"—meaning that the technologies and investments applied

to reduce NOx and SO_2 for the CAIR will also reduce mercury emissions. The emission cap levels for Indiana and the nation are permanent, regardless of whether additional coal-fired power plants are built. Any newly constructed plants would need to obtain mercury allowances from the market or other sources (such as a plant retirement) in order to operate.

Table 1

Indiana IOU Costs of Compliance for NOx SIP Call[3] and CAIR/CAMR*

	NOx SIP Call		CAIR/CAMR	
	Capital Costs	Annual O&M Costs	Capital Costs (estimates)	Annual O&M Costs (estimates unless noted)
Duke Energy Indiana	$ 548,000,000	$ 6,047,388**	$ 1,000,000,000	$ 5,319,088**
IPL	$ 260,000,000	$ 2,113,425	$ 182,000,000	$ 25,199,000
NIPSCO	$ 246,246,450	$ 4,718,504	$ 23,000,000	$ 11,400,000
SIGECO	$ 250,000,000	$ 10,366,503	$ 110,000,000	$ 173,560***
TOTALS	$1,304,246,450	$ 23,245,820	$ 1,315,000,000	$ 42,091,648

Source: Utility filings at the IURC
* Capital expenditures for the NOx SIP Call are from 2001 to 2006; and for the CAIR/CAMR, 2007-2011. I&M has incurred some costs for NOx SIP Call compliance, but has not filed for cost recovery.
** Based on 6 month estimate Jan-June 2007
*** Actual for 2007

Carbon Dioxide Regulation and Climate Change

The U.S. Congress is 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 (CO_2), a major component of the exhaust gases emitted from coal and gas-fired power plants. In April 2007, the U.S. Supreme Court ruled 5-4 that CO_2 is a pollutant subject to regulation by EPA under existing environmental laws.

[3] 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."

Impact of CO_2 Legislation on Indiana

Indiana's high ranking among states in CO_2 emissions due to coal-fired electric generating plants, coupled with Indiana's relatively large industrial sector, means that Indiana will be especially affected if this becomes the new regulatory policy.

The impact of federal CO_2 legislation on Indiana could be significant. Indiana's high ranking among states in CO_2 emissions due to coal-fired electric generating plants, coupled with Indiana's relatively large industrial sector means that Indiana will be especially affected if this becomes the new regulatory policy. Costs are difficult to estimate, as there is no "standard" control methodology.

The PJM 2006 State of the Market Report Table 2-50[4] shows the contribution of existing regulated pollutants to the overall wholesale market electricity price for the calendar year 2006. The table shows that NOx emission costs accounted for 2.9% and SO_2 accounted for 10.1% of the wholesale market price. Given the high volume of CO_2 emissions in Indiana, the contribution from CO_2 on market prices could be similar to the number for SO_2, around 10%; although at the present time any forecast is likely to be just a guess.

Key Policy Decisions and Potential Ramifications

Carbon regulation seems likely, and it will create significant upward pressure on utility costs. CO_2 reductions can be achieved by regulating the amount emitted (cap and trade) or the price (a carbon tax). One other model combines elements of each of these methods, along with a safety valve price.

A cap and trade program involves the setting of a cap on the amount of a pollutant that can be emitted. Those companies or other emitters covered under the regulation are given credits or allowances which represent the right to emit a specific amount. The total

[4] The PJM Interconnection is discussed later in this report. The PJM State of the Market report can be found here: http://www.pjm.com/markets/market-monitor/som.html.

amount of allowances cannot exceed the cap, limiting total emissions to that level. The cap can be lowered over time so that less CO_2 is emitted each year. A market is created in which allowances are bought and sold. Companies that emit beyond their legal limit must buy credits from those that emit less than their limit. Proponents of the cap and trade method argue that it is much more cost effective at achieving given reductions than a tax or a plant-by-plant limit, because it allows a market to determine the most cost-effective method to achieve reductions. Those entities that can reduce emissions more cheaply will do so first, while those that would otherwise face more expensive options can purchase allowances in the market. Thus, it is argued that overall, a least-cost solution will be achieved. Opponents' main arguments against cap and trade are the costs of the government bureaucracy created to administer the program and the fact that compliance costs are unknown and uncapped. Cap and trade programs have been successfully implemented for SO_2 reduction in the 1990s, and in this decade to reduce nitrogen oxides in the NOx SIP Call. Original cost estimates for the SO_2 program ranged from $3 to $25 billion per year. After the first two years of the program, the costs were around $0.8 billion per year. The long-term costs of the program are expected to be around $1.0 to $1.4 billion per year, far below early projections.[5]

A carbon tax is a tax on sources that emit CO_2 into the atmosphere. Under this scenario, the federal government would decide which sectors of the economy to tax. One method would be to tax the burning of fossil fuels in proportion to their carbon content. Proponents of the carbon tax argue that such a system does not require as much oversight as cap and trade does, and thus a tax is easier to administer. Opponents argue a tax would not ensure a specific amount of CO_2 emissions, and that some companies might even evade the tax by moving operations outside of the U. S.

[5] Environmental Defense, "The Cap and Trade Success Story", http://www.environmentaldefense.org/page.cfm?tagID=1085.

An auction process would be detrimental to Indiana, because ratepayers would not only pay for CO_2 control benefits at generating plants, but would also have to pay for the allowances in the market.

Under a cap and trade system, the way in which allowances are distributed would impact Indiana ratepayers. In previous EPA programs, allowances have been granted on a relative basis to fixed sources of emissions (i.e., generating plants) based on their heat input history. Some are now proposing that CO_2 allowances be auctioned off by the government rather than granted to the present sources of CO_2 emissions. Under an auction process Indiana ratepayers would not only pay for CO_2 control retrofits at generating plants, but would also have to pay for the allowances in the market. This allocation method could hit Indiana and other coal-dependent regions (i.e., the Midwest, the Southeast, and the Great Plains) hard.

Demand Response - Advanced Metering and Time Based Rates

A topic that has received increasing attention recently has been demand response. Demand response involves actions that electric utility customers take to reduce their electricity demand. Usually these actions are taken during times of peak electricity use (when the cost to provide service is greater), but demand response can also include conservation measures which reduce demand during most or all hours of the year. Many suggest that the effective use of demand response can reduce the amount of future generation that is built—especially plants built specifically to meet peak demand—and in turn reduce the level of 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 large effect on the mitigation of wholesale power price spikes, and can also reduce the number of peaking plants that are needed to be constructed.

In 2006, the Indiana Office of Energy and Defense Development released the Indiana Strategic Energy Plan. The plan, also known as "Hoosier Homegrown Energy", included the following action items to stimulate demand response across the state[6]:

- Support alternative pricing regulatory mechanisms that encourage utilities to promote efficiency and conservation by their customers without incurring negative financial results;
- Encourage creative pricing mechanisms to ensure a reliable and reasonably priced energy supply, including interruptible rates, seasonal rate differentials and restructuring of fixed and variable charges; and
- Support the National Action Plan for Energy Efficiency through gas and electric utilities, regulators and industry partners to create a sustainable, aggressive U.S. commitment to energy efficiency.

The IURC began its own investigation into Advanced Metering issues (Cause No. 43083) on July 26, 2006. This investigation is discussed later in this report.

Renewable Portfolio Standards

A Renewable Portfolio Standard (RPS) is a requirement that electricity providers obtain a minimum percentage of their power from renewable energy resources by a date certain. According to the U.S. Department of Energy, 20 states and the District of Columbia have RPS policies in place. These states account for more than 42% of the electricity sales in the United States. Percentage goals range from 4% to 25%, targeted deadlines range from 2009 to 2025, with a little more than half of the deadlines falling between 2020 and 2025.

[6] The Plan can be found here: http://www.in.gov/energy/strategicplan/

While a number of states have created Renewable Portfolio Standards, actual experience with these policies remains limited.

While a number of states have created Renewable Portfolio Standards, actual experience with these policies remains limited. Few of the programs have existed for more than a few years and many have yet to go into effect. Also, while the concept of a RPS is straightforward, actual RPS program designs differ substantially from one another.

According to a study published by the Lawrence Berkley National Laboratory (LBL)[7], some RPS programs appear to have resulted in significant renewable development at a relatively low cost, while others have not. State RPS programs are but one of a number of drivers for renewable energy development. Other significant drivers include federal and state tax incentives, state renewable energy funds, state integrated resource plans, voluntary green power markets, and the economic competitiveness of renewable energy relative to other generation options.

The LBL study also found that state RPS programs could have substantial impacts on electricity markets, ratepayers, and local economies. Cost impacts of state RPS have varied greatly by state, but there is little evidence of a sizable impact on average retail electricity rates. However, the full cost impacts are difficult to determine, since many of the programs are in the very early stages of implementation.

[7] See Wiser, Ryan, Christopher Namovicz, Mark Gielecki, and Robert Smith. "Renewables Portfolio Standards: A Factual Introduction to Experience from the United States." LBNL-62569, April 2007, http://eetd.lbl.gov/ea/ems/reports/62569.pdf.

III. EFFECTIVENESS OF REGULATION

Adjustable Rate Mechanisms

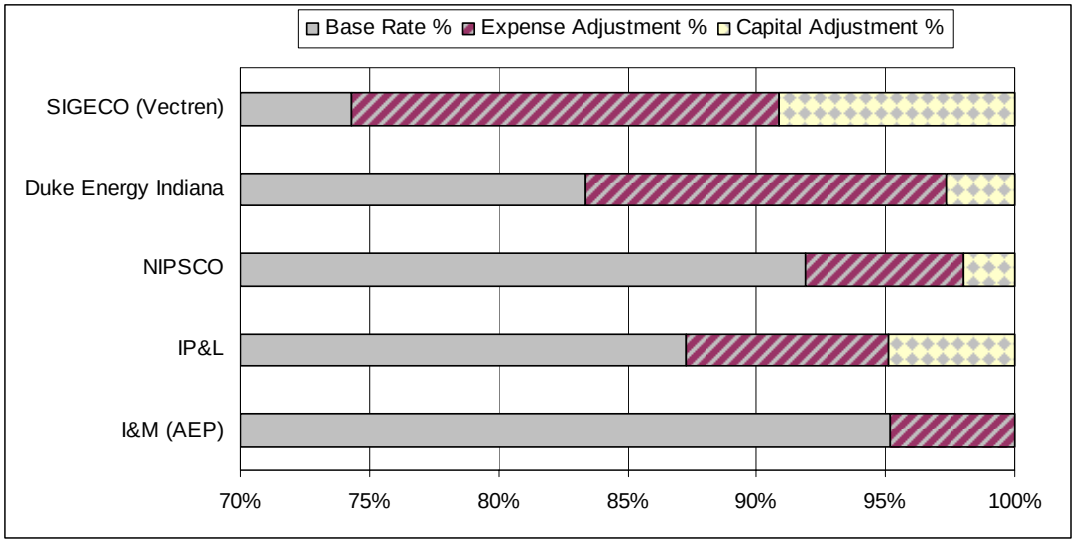
Indiana's regulatory statutes include adjustable rate mechanisms (trackers) as an integral part of regulation.

Indiana's regulatory statutes include adjustable rate mechanisms (trackers) as an integral part of regulation. An expense tracker allows retail rates to be adjusted outside the context of a base rate case in order to reflect changes in operating expenses and does not include a return on such expenses. A capital investment tracker allows recovery of and a return on capital expenditures. See Table 2 below for a breakdown of how base rates, expense adjustments and capital adjustments contribute to a residential customer's bill. The makeup of these mechanisms varies for a utility in part due to the size of the company, the magnitude of a company's construction program, and how much time has elapsed since the last base rate case.

Table 2

Indiana Investor-owned Electric Utilities, July 1, 2007 Residential Billing

% of Bill Comparison



The Commission's expense tracker authority is codified at I.C. § 8-1-2-42 and I.C. § 8-1-8.8. An expense tracker generally allows a utility to reflect a current expense or set of expenses in its retail rates without undertaking the time and expense of a base rate case. There is no return on tracked expenses. Expenses which are characterized as largely outside the utility's control and materially significant are the intended target of such trackers.

The fuel adjustment charge (FAC) has existed in Indiana for more than three decades and tracks a utility's largest variable operating expense. The types of other expenses which are tracked has expanded significantly in recent years to include demand-side management, emission allowances, purchased power capacity, clean coal technology operation and maintenance, 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 risk is, in essence, transferred from the utility's investors to the utility's ratepayers in the form of rate volatility.

Capital investment tracker authority in Indiana is codified at I.C. § 8-1-8.8 and I.C. § 8-1-2-6.6. 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 of a base rate case. This regulatory treatment significantly reduces the time lag between capital expenditure and 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 restrictions. Recently Duke Energy Indiana sought such treatment for its $2 billion investment in a 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.

The use of both expense and capital trackers have a favorable impact on credit ratings and therefore the cost of capital for Indiana utilities. The extensive use of expense trackers in particular also presents concerns. Isolating the utility from the effect of expense changes may make it indifferent to such changes, as trackers effectively shift the impact of the changes to retail customers. The premise that tracked expenses are outside the control of the utility does not generally alter the fact that the customer is not at the negotiating table and therefore even more removed from controlling the expense. Traditional regulation, with its inherent lag between expenditure and recovery, serves as an expense constraint incentive which an expense tracker nullifies.

Expense tracker retail rate adjustments are processed via proceedings which consider materially less than a base rate case and are often viewed as single-issue ratemaking exercises; a condition generally in opposition to core ratemaking principles. The type of expenses and revenues tracked are also susceptible to selective inclusion. A utility may seek authority to track increasing expenses while not tracking decreasing expenses. Such asymmetry provides the means to reduce utility exposure to under earnings risk, while still affording the opportunity for increased earnings through reducing non-tracked expenses. The ability to balance the utility's risk and reward through an appropriately set rate of return does not exist in expense tracker proceedings. The direct pass-through of expenses may also create affiliate transaction concerns. While the regulated utility is indifferent to increasing prices an affiliated supplier may see opportunity in such a development.

Capital investment trackers are a useful tool in providing incentives to Indiana utilities in support of utilizing Indiana's natural resources. However, the ability to generate earnings on investments, without having to pursue a base rate case, likely extends the time between full rate case reviews for a specific utility. The pace of change in the industry and the desire to have retail rates reflect current operating conditions drive a need for more rather than less frequent base rate case reviews.

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 making the company's operations in harmony with its current operating conditions. A full rate case for each year of operations would be as useful as it is impractical. Notwithstanding a rate case is the gold standard; it is not the only tool that leads to appropriate regulation. The balance must be struck by the Commission as it has the experience and resources to make that determination. Thus, good regulation contemplates a mix of both trackers and rate cases, which mix should be determined by the IURC.

This tenuous balance has been impacted by the "Clean Coal" legislation (Senate Bill 29 codified as I.C. § 8-1-8.8) that in certain respects limits the Commission's approach to oversight of generation projects that utilize advanced technologies to burn coal. While the legislature has provided the Commission with specific authority to review projects under this statute, once a project has been approved, the costs are essentially tracked through rates without the need for further review by the Commission.[8] The "retail rate adjustment mechanism" (a.k.a. "tracker") created by the statute allows a utility to continue to recover construction, operation, and maintenance costs for an indefinite period past the in-service date of the project. As a consequence, trackers that emanate from this Statute could obviate the need for a utility to ever come before the Commission for a rate case, as cost recovery is assured under the statute. While a utility *can* ask for periodic review by the Commission of project costs under the "Certificate of Need" Statutes (I.C. § 8-1-8.5 and I.C. § 8-1-8.7), such review is limited in scope to a review of *changes* in the cost for the project or the continued need for the project.

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[8] I.C. § 8-1-8.8-15 "**Commission's power to review approved projects** The commission may review any project approved under this chapter to determine that the project continues to comply with the commission's order initially approving incentives under this chapter. The commission may revoke any incentive approved in the order if the commission finds that the project no longer complies with the provisions of the order concerning the incentive. *As added by P.L.159-2002, SEC.6."*

The process outlined in the statute has been used with respect to the timely installation and recovery of the limited costs associated with environmental control devices mandated by the U.S. EPA. However, more recently, the statute has also been utilized to request approval for the purchase or construction of new generating facilities that utilize clean coal technologies outside of a rate case and prior to placing the facility in service. While trackers can be an appropriate tool, periodic rate cases are the most appropriate approach in which the Commission can review costs in a manner that allows it to effectively balance the interests of utilities and ratepayers.

Complex Holding Company Structures

The Energy Policy Act of 2005 and its chapter enacting the Public Utility Holding Company Act of 2005 (PUHCA05) became law at an historic time in the evolution of the provision of energy to consumers in the U.S. This evolution, exemplified by the recent merger of Cinergy Corp. and Duke Energy Co., results in concentration and ever-larger utility companies with increasingly complex affiliate relationships. Repeal of the Public Utility Holding Company Act of 1935 (Old PUHCA), which proscribed mergers of non-contiguous utility systems, relaxed limitations on diversification.

The trend to increasing consolidation and complex affiliate structures provides challenges to achieving a balance that protects consumers yet provides energy companies with sufficient flexibility to achieve their legitimate business objectives. The development of larger, complex multi-state utility systems presents additional challenges well beyond simply dealing with more data to scrutinize and audit. Increased size and scope:

- promise greater complexity in the interrelationship between elements of a utility system, parts of which may generally be subject to regulation and parts not; and
- require oversight across different kinds of local regulatory systems, in that one public utility holding company may, through subsidiaries and affiliates, offer retail service in jurisdictions where the regulatory yardstick is cost-of-service and also in jurisdictions where competitive market forces are used to determine just and reasonable retail prices.

Regulatory oversight of complex affiliate relationships is also made more difficult by the different agencies that may be interested in the regulation of an electric utility system. Sometimes agency authority overlaps, and care must be taken by regulators to avoid frustrating the mandates of other regulators. Sometimes, despite multiple agency interests, regulatory gaps exist.

Like all state commissions, this Commission's ability to regulate its holding companies is dependent on its jurisdictional authority, resources, and expertise. However, given the repeal of the Old PUHCA and the ongoing implementation of PUHCA05, the Commission's ability to continue rendering satisfactory regulation will not only depend on the evolving utility industry structure and environment, but also on the outcomes of actions being taken at the federal level, primarily the Federal Energy Regulatory Commission (FERC).

On July 19, 2007, the FERC issued a trio of orders designed to provide greater clarity and guidance on its merger and corporate review policies, while trying to ensure ratepayer protection against unauthorized cross-subsidies of utility and non-utility affiliates. One of the orders was a notice of proposed rulemaking in which the FERC proposes to codify restrictions on the pricing of transactions between public utilities with captive retail customers and their power sales affiliates or non-utility affiliates. The proposed rule expands the transactions and entities to which these restrictions apply, in order to protect against inappropriate cross-subsidization of regulated and unregulated activities.

IV. INFRASTRUCTURE

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

Expected environmental regulations and growing customer needs will necessitate a significant level of infrastructure investment which will result in retail rate increases. For example, the State Utility Forecasting Group (SUFG) projects[9] that Indiana will need approximately 6,100 MW of additional generation by 2015. Base load generating plants can take up to five to ten years to construct. Significant construction projects, such as environmental compliance, base load generation and associated transmission, are capital intensive; 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 – 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, 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 non-traditional entities (merchant plants) in

[9] December 2005 State Utility Forecasting Group report Indiana Electricity Projections: The 2005 Forecasts.

2000 to 2003 in Indiana. Many of these plants have subsequently been purchased by regulated Indiana utilities at prices significantly below net book value. Currently 1,286 MW (32%) remain as merchant units and 2,781 MW (68%) are in utility generation portfolios, of which 1,205 MW are in Indiana utility portfolios.

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 2012 and regionally by 2015[10]. To date, Indiana utilities have generally utilized wholesale purchases from other sources, rather than building capacity, to maintain 12% 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.

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

Data from the SUFG[11] indicates that residential load growth averaged 9% in the years 1965-1974, 2% in the years 1975-1984, 2.5% in the years 1985-1998, and 1.4% in the years 1999-2005. Using an assumed 12% reserve margin, load and capacity were closely matched in 1980-1981; thereafter surpluses existed until 1999. When load growth dropped from 9% to the 2–2.5% range, the utilities were overbuilt from approximately 1981 to 1999.

Table 3 shows the age profile for the fleet of electric generation owned by Indiana utilities. As illustrated in Table 3, 58% of the coal based fleet is over 30 years old and 23% of that fleet is over 40 years old. Natural gas-fired generation is much newer, with only 28% of that fleet over 10 years old. Gas is three to four times more expensive than coal. As a result, gas units typically operate only 10% of the year, primarily in periods of high peak demand.

Table 3
Age Profile of Indiana Generating Units

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	21	1,682	10.2%	10	241	5.9%
40	37	3,735	22.6%	15	265	6.5%
30	54	9,651	58.4%	24	611	14.9%
20	65	15,197	91.9%	27	831	20.2%
10	70	16,528	100.0%	32	1,155	28.1%
1	70	16,528	100.0%	42	4,105	100.0%

Future Generation for Indiana Demand

The December 2005 SUFG forecast of Indiana electric generation shows net peak demand growing to 24,206 MW by 2015 and a need for new generation of approximately 6,100 MW by that time. Table 4 shows generation projects approved by or pending before the Commission.

[11] December 2005 State Utility Forecasting Group report Indiana Electricity Projections: The 2005 Forecasts.

Table 4

Approved and Pending Indiana Generation Plants

Projects Approved by the Commission	**MW**	**Completion Date**
IPL - Georgetown 4 CT purchase	73	2008
Benton County wind farm	130	2008*
Hoosier Energy landfill gas	Up to 20	2010
IMPA - Trimble County 2 in Kentucky	100	2010
IMPA - Prairie State in Illinois	200	2012
IMPA - Thoroughbred in Kentucky	100	2013
TOTAL	623	
Projects Pending Before the Commission	**MW**	**Completion Date**
Duke Indiana - Edwardsport IGCC	620	2012
Indiana Gasification LLC	134	2013
TOTAL	754	
Shortfall Amount in 2015 assuming 12% Reserve margin	4,723	

* 100 MW purchase by Duke Energy and proposed 30 MW purchase by SIGECO

If Commission approval is granted for the Edwardsport IGCC and the Indiana Gasification LLC projects, there would be up to 1,377 megawatts represented by all of the projects, with 400 megawatts (approximately 30%) being built outside of Indiana. This would still leave a shortfall of 4,723 MW in 2015, based on the SUFG projection.

In addition to the need for new generation from load growth, environmental rules regarding SO_2, NOx, mercury and potentially CO_2 will put pressure on older, less efficient, generating units either to make investments in new emission controls or to shut down.

In addition to the need for new generation from load growth, environmental rules regarding SO_2, NOx, mercury and potentially CO_2 will put pressure on utilities to either install new emission controls on older, less efficient generating units or to shut the units down. These older units already have higher heat rates (and thus higher fuel cost per MWh produced) and it will be necessary for the utility operator to determine whether the

unit will run enough in the Regional Transmission Organization (RTO)[12] markets to recover capital costs and operations and maintenance expense. Additionally, environmental retrofits can reduce the output of the plant due to the power needed to operate the pollution control equipment.

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

The Annual Energy Outlook 2007 by the Energy Information Administration (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 for the region, including Indiana, provides the regional fuel mix forecast for 2015. These two fuel mixes are compared to the projected Indiana fuel mix in Table 5 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 5

Comparison of Generation Fuel Mix Forecasts

	Indiana 2007	Indiana 2015	Regional RFC 2015	National EIA 2015
Coal	69.2%	67.0%	47.1%	34.7%
Natural Gas	20.6%	24.6%	28.1%	30.6%
Oil	1.4%	1.1%	6.3%	9.7%
Renewable	0.0%	0.3%	2.5%	0.1%
Pumped Storage	0.0%	0.0%	1.6%	2.3%
Nuclear	8.5%	6.8%	13.4%	11.1%
Hydro	0.3%	0.2%	1.0%	11.5%
	100.0%	**100.0%**	**100.0%**	**100.0%**

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

[12] Regional Transmission Organizations are discussed in detail later in this report.

Transmission

Electric Transmission in the United States

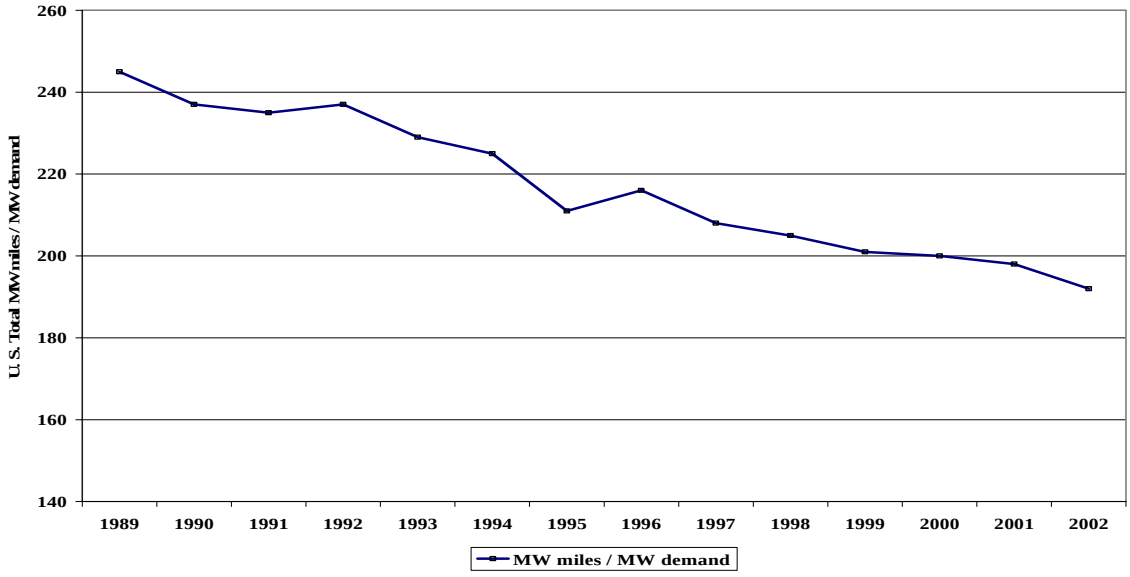
Transmission investment in the United States declined 22% from 1989 to 2002.

Nationally transmission investment has been lagging in recent years. Between 1979 and 1989 transmission capacity increased slightly faster than summer peak demand. After 1989 this capacity grew at a much slower rate and has lagged growth in demand. Table 6 shows that the U.S. total MW miles / MW demand has declined from 245 in 1989 to 192 in 2002, a decline of 22%. The last significant transmission built in Indiana was constructed in the 1980s, as the long cycle of base load plant construction came to an end.

The transition to competitive wholesale markets in the electric utility industry created additional complexities in the process of planning, siting and construction of new transmission facilities; thus further slowing new construction. In 1989 the transmission system did what it was intended to do—move power from generation plants owned by local utilities to meet the needs of local consumers. The creation of RTOs changed how transmission is used, facilitating wholesale power markets across broad regions, necessitating both a change in the design of and the level of investment in transmission facilities. Data indicates that nationally the response to both changes has been inadequate. In Indiana, the current transmission system is satisfactory. Because of lead times, specific transmission projects are in the early stages of planning.

Table 6

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 Energy Policy Act of 2005 (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 RTO Planning Processes

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 region, and explore opportunities for interregional benefit. RTOs look at a wide range of transmission, generation, and demand-side resource options to resolve reliability problems and to improve the economic performance of the bulk power system. The planning process encompasses a broad range of entities, including state regulators, consumer organizations and others active in the regional power market. The hope of this regional planning process is transmission

expansion plans that are more cost effective and more transparent to all participants in the wholesale power market.

Transmission Planning at the Midwest ISO

The transmission expansion planning process employed by the Midwest ISO is bifurcated into two distinct areas for assessment. One is planning to meet reliability needs; the other is planning for economic expansions. It is often thought that reliability based expansions are necessary, while economic expansions are discretionary. The Midwest ISO transmission planning process uses a five-year horizon in order to address reliability needs.

Highlights of the Midwest ISO 2006 transmission expansion plan include:

- 416 projects representing an investment of $3.6 billion through 2011;
- Elimination of 22 of the top 30 transmission bottlenecks limiting market operations; and
- Facilitation of new generation entry by providing expansions to accommodate 14,400 MW of generation capacity in the Midwest ISO footprint through 2011, of which 5,100 MW is base load supply and 2,810 MW is renewable resources.

About 2,200 miles of transmission line upgrades are projected through 2011. This represents around 4% of the approximately 53,000 miles of existing higher voltage transmission lines throughout the Midwest ISO region. Approximately 4% of the recommended line upgrades involve lines in new transmission corridors, and around 60% of the expected total transmission line and substation enhancements are at 230kV and above.

The Midwest ISO is also working on a number of significant expansions that will be recommended for approval by the Midwest ISO Board of Directors when justified. One of these projects is 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 system, and to the south on non-Midwest ISO systems. All of this transmission and the 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 proposes two new 345 kV lines, one to the west and another to the east of the SIGECO system. These projects are under active consideration, but have not been fully evaluated at this time.

Transmission Planning at the PJM Interconnection

The PJM transmission expansion planning process analyzes transmission upgrades to address needs within five years to maintain reliability of the transmission system and also assesses long-term needs that require a planning horizon of fifteen years or more. The PJM plan integrates transmission, generation and demand-side resources to address transmission system constraints involving reliability and persistent congestion.

The PJM has a bifurcated fifteen year planning process. Earlier this summer, the PJM Board of Directors approved $2.9 billion in transmission upgrades and additions, including two major new transmission lines. From 1999 though 2006, the PJM authorized $4.2 billion of transmission upgrades and additions, including more than $2.3 billion in 2006 alone. Reliability-related transmission upgrades across PJM amounting to $3.5 billion ensure that reliability criteria continue to be met.

Rate Impacts of Transmission Investment

Transmission 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 will 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 the timing of rate cases, the magnitude of specific investments, etc.

V. EFFECTS OF FEDERAL LEGISLATION

Energy Policy Act of 2005 Standards

The comprehensive Energy Policy Act of 2005 created the need for state commission consideration of five new standards.

Net Metering

Net metering is an arrangement in which customer-owned generation is interconnected with the utility, so that energy can flow to and from the distribution grid, and the customer is billed only for his net energy consumption.

Net metering is an arrangement in which customer-owned generation is interconnected with the utility, so that energy can flow to and from the distribution grid and the customer is billed only for his net energy consumption. The net metering rule, which became final on December 21, 2004 (codified as 170 IAC 4-4.2), applies to all Indiana investor-owned electric utilities and directs each to provide the opportunity of net metering to residential customers and K-12 schools. The rule is intended to encourage small-scale renewable energy projects, allowing users a measure of energy independence without jeopardizing the safety, energy cost or service quality of others on the interconnected grid.

Net metering tariffs for the five Indiana IOUs (including revisions to three existing tariffs) were approved in the spring of 2005. On March 1 of subsequent years, the utilities report to the Commission the number, type and size of net metering facilities on their systems. The utilities reported the following information for 2006:

Table 7

Indiana IOU 2006 Net Metering Summary

Utility	Total Number of Net Metering Customers and Facilities	Number, Size and Type of Net Metering Facilities
Indiana Michigan Power	1	1 – 1.1 kVA Photovoltaic
IPL	2	2 - 1.05 kW (total) solar
NIPSCO	3	1 – 2.5 kW solar 1 – 1.36 kW solar 1 – 0.64 kW solar
PSI Energy (Duke)	17	1 – 28.8 kW solar 1 – 2.15 kW solar 11 – 1.8 kW solar 4 – 1.0 kW solar
SIGECO	1	1 – 5.0 kW solar

Smart Metering

On July 26, 2006, the Commission initiated an investigation (Cause No. 43083) to consider whether it is appropriate for electric utilities in the State to provide and install meters and communications devices to allow for customer participation in time-based pricing and other demand response programs. [13]

[13] Cause No. 43083, Final Order, 8/1/2007, pages 5-6: "Generally, the term "smart meter" is used in reference to a type of advanced meter that has the capability to identify consumption in more detail than a conventional meter and is used in conjunction with other systems or networks to communicate that information to the utility. Because any advanced meter must be used in conjunction with other systems, broader, interchangeable terms, such as Advanced Metering and Communications, Advanced Metering Infrastructure ("AMI"), and Advanced Metering System, are also used to capture the networks, communications hardware and software, data management, billing and other systems and infrastructure necessary to permit the advanced meter to communicate with utility business systems.

The term Automated Meter Reading ("AMR") is a related term. AMR refers to metering systems that are more advanced than conventional systems. AMR provides remote meter reading functionality and some operation benefits, often through the use of mobile reading via a vehicle driving by the meter or in some cases one-way fixed network communication systems. AMR systems do not allow interval measurement and do not provide two-way communication and data to the customer but may sometimes be upgraded to provide such functionality."

The Commission recently found that it was not appropriate to implement technologies to facilitate time-based pricing and other demand response programs at this time, due largely to the lack of a solid foundation for demand response programs

In its order in Cause No. 43083, approved August 1, 2007, the Commission found that it was not appropriate to adopt the standards set forth in Section 1252 of EPAct 2005. This conclusion, however, was due in large part to the lack of a solid foundation of demand response programs in the state from which such an action would constitute a logical and evolutionary next step. While the Commission does consider it appropriate to ensure that every jurisdictional electric utility in Indiana be prepared to offer advanced technologies to their customers, this cannot be accomplished from a standing start. The Commission found that jurisdictional electric utilities must take steps now to ensure the creation of a solid foundation of demand response programs statewide. This can be accomplished through the examination of the demand response issues within their respective integrated resource plans; future evaluation and requests for consideration of such programs by the Commission; and by continued discussions and collaboration with customers and the Office of Utility Consumer Counselor regarding the development of effective programs, including pilot programs, in each jurisdictional utility's service territory.

Interconnection

The Commission's interest in distributed generation resource issues resulted in the promulgation of a general rule to cover all interconnections between Indiana investor-owned electric utilities and their customers who wish to generate power with customer-owned generators. The rule became effective on April 5, 2006 (codified as 170 IAC 4-4.3).

The interconnection rule establishes three levels of scrutiny for proposed distributed resource projects, based on the size of the project and other technical parameters. Level 1 is for projects of 10 kilowatt or less; Level 2 for projects less than 2 MW; and Level 3 covers all other projects. The rule makes the interconnection process between utilities

and customers more transparent and consistent across the state. Once the interconnection is complete, customers may be able use their generating resource to participate in demand response programs. In March of each year, the utilities will submit an annual report detailing the applications and interconnections for the previous calendar year.[14]

Fuel Diversity & Fossil Fuel Efficiency

On July 19, 2007, the Commission initiated a proceeding (Cause No. 43321) to commence its consideration of Fuel Sources and Fossil Fuel Generation issues referenced in sections 111(d)(12) and (13) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)), as amended by EPAct 2005. With respect to Fuel Sources, under section 111(d)(12), each electric utility shall 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 under section 111(d) (13), each electric utility shall develop and implement a 10-year plan to increase the efficiency of its fossil fuel generation. The deadline established for a determination regarding Fuel Sources and Fossil Fuel Generation is not later than three years after the date of the enactment of EPAct 2005, or August 8, 2008.

National Interest Electric Transmission Corridors

The EPAct 2005, Section 1221(a), required the United States Department of Energy (DOE) to issue the National Electric Transmission Congestion Study (August 8, 2006). The Act also gives the Secretary of the DOE authority to designate as a "National Interest Electric Transmission Corridor" (National Corridor) any geographic area experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers.

[14] The first reports for 2006, contained information very similar to the Net Metering Reports. This is because there was not other interconnection activity (larger distributed generation projects) in Indiana in 2006.

Federal preemption of states[15] would occur if, after being designated as a National Corridor, a utility does not promptly receive approval from a state to site a proposed new transmission project within a National Corridor. At that point, the FERC will consider whether to issue a permit and to authorize construction. A federal permit could empower the utility permit holder to exercise the right of eminent domain to acquire necessary property rights to build a transmission project. That authority could only be exercised if the developer could not acquire the property by negotiation. The authority would not apply to property owned by the U.S. or a state, such as national or state parks.

While there are no current National Corridors in Indiana, Indiana was designated as a "Conditional Congestion Area."

While there are no current National Corridors in Indiana, Indiana was given the designation as a "Conditional Congestion Area." These are areas where Indiana utilities have planned generation and, while there is some transmission congestion present, significant congestion would result if transmission was not built in conjunction with the new generation resources. These Conditional Areas include: (a) ties between Commonwealth Edison of Chicago and I&M in the Dune Acres-Michigan City area, which will also relieve some constraints in the NIPSCO area, and (b) facilities improving transmission at the Indiana-Ohio border, which will affect Duke Energy, IPL, SIGECO, and I&M.

The Midwest ISO and the PJM have responsibilities for monitoring the transmission system and recommending enhancements to improve reliability, economic efficiency, and relieving constraints. The Commission and the Office of the Utility Consumer Counselor are active participants in the planning processes of the Midwest ISO and PJM.

[15] The Indiana Commission does not have explicit statutory authority over siting of transmission facilities. Since Indiana does not have siting authority, federal preemption over local units of government is automatic.

VI. COMPETITION

Regional Transmission Organizations

In Indiana, retail competition does not exist. Retail competition does exist in Illinois, Ohio, and Michigan. However, federally-mandated wholesale market competition, where utilities can obtain the lowest cost electricity, is developing through the existence of regional transmission organizations.

The FERC issued landmark orders in 1996 and 1999 which advanced open access transmission and formed RTOs, also referred to as Independent System Operators (ISOs). The formation of RTOs and ISOs was intended to address operational and reliability issues while preserving wholesale transmission services from discriminatory behavior. Transmission-owning utilities were encouraged to voluntarily transfer operational control of their transmission facilities to an RTO to ensure independent operation of the transmission grid. According to the FERC, RTOs and ISOs now serve more than half of the U.S. Currently there are seven RTOs operating in the U.S.[16] This is an example of a federal decision with jurisdiction over a small segment of the industry that states now have to implement and pay for.

An RTO is an independent entity that oversees electric reliability throughout a geographic region, and is responsible for coordinating the wholesale electric transmission system in that region. When a utility joins an RTO, it transfers only operational control (but not ownership) of its transmission system to the RTO. The dispatch of generation is the principal means by which the RTO system operators manage the transmission system and keep the system within its physical limits for safe and reliable operation.[17]

Based upon bids submitted by generation-owning utilities, the RTO centrally dispatches generation resources throughout the regional transmission system to meet the

[16] Page 10, of FERC's June 22, 2007 Advanced Notice of Proposed Rulemaking, docket AD07-7-000.
[17] RTOs schedule and dispatch generation in their region using a methodology based on the prices and operating characteristics offered by generation owners. This methodology results in the most economical use of resources for the entire region.

demand for electricity at the lowest possible production cost. Compared to the dispatch of individual utilities, RTOs dispatch generation across a broader region allowing the RTO to take advantage of a larger area of load differences, to utilize the lowest cost generation resources available. The Commission has participated in the development of RTOs and has reported these activities in previous reports submitted to the General Assembly.

Indiana's transmission owning electric utilities all participate in RTOs and belong either to the Midwest ISO or the PJM Interconnection (PJM).[18] Members of the Midwest ISO are: Duke Energy Indiana, IPL, SIGECO, WVPA, Hoosier Energy, and NIPSCO. I&M is a member of the PJM. IMPA is a member 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 committed, ensuring that the most economic generation is utilized across the region;
- Generation dispatch – the total dispatch costs are reduced by producing energy from the most economic 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 used by the RTO provides more responsive and accurate control of power flows on the transmission system, thus improving system reliability. Being able to view a much wider geographic area allows RTOs to identify system problems and 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 600 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 – provides for meeting customers' power needs on a more optimal basis by regional planning; and
- Demand response – allowing greater opportunities 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 in regards to location and payment of the facilities.
- Implementation of long-term regional transmission planning processes.
- Inclusion of demand response resources – requires the communication of price information. Retail customers generally are not aware of cost increases due to peak demand and supply shortages, and therefore continue normal consumption even when power supplies are tight and wholesale prices are high.
- Development of renewable resources by allowing such generation to sell power into a transparent wholesale market.
- Continued development and cost-effective improvement of RTO markets.

Effectiveness of RTOs

Of the vast policy changes that have affected the U.S. electric power industry over the past 10 to 15 years, perhaps the biggest has been the creation of RTOs. These entities were created largely at the behest of the FERC with the intention of reducing electricity prices directly through stronger competition in wholesale markets, and indirectly by eliminating cost inefficiencies with increased reliance on market processes.

Despite the considerable potential benefits RTOs can bring to the industry and their customers, as with consideration of any utility investment there is a need to demonstrate to the Commission that there are quantifiable net benefits. There have been numerous complex studies that have demonstrated that aspects of RTO operations (e.g., regional coordination of power plant operations, the ability of individual utilities to reduce operating reserves) have resulted in quantifiable net benefits. However, many of the benefits are not readily quantifiable (e.g., reliability improvements). As a result, there has not been a comprehensive assessment of net benefits of RTOs. Some of the studies, especially some of the earlier studies, have experienced data and methodology problems that, to varying degrees, weaken their credibility.

Utilities can leave the Midwest ISO so long as their state commission and the FERC approve. Louisville Gas & Electric Company and Kentucky Utilities Company were dissatisfied with the net benefits they felt they were receiving by participating in the Midwest ISO, and in 2005 petitioned the FERC and the Kentucky Public Service Commission to withdraw from the Midwest ISO. Their withdrawal became effective September 2006.

The membership in the PJM seems to be constant. Membership in the Midwest ISO is more in a state of flux. In the past several months, both IPL and Hoosier Energy submitted letters to the Midwest ISO giving the required one year notice of their intent to withdraw their membership. This is the first step required under the Midwest ISO rules to terminate membership, but neither IPL nor Hoosier Energy has taken any action to

initiate the necessary regulatory reviews before the IURC or the FERC. There are, however, utilities that have expressed an interest in joining the Midwest ISO.

Effects of Wholesale Competition on Indiana Retail Ratepayers

The wholesale price of electricity, which the Commission does not control, 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 defer these RTO administrative costs for subsequent recovery in a rate case.

VII. APPENDICES

Appendix A – Electric Utility Revenues

Electric Utility Revenues
Year ending December 31, 2006

Rank	Utility Name	Operating Revenues	% of Total Revenue
1	Duke Energy Indiana	$ 2,110,837,248	29.09%
2	Indiana Michigan Power D/B/A AEP	$ 1,893,316,448	26.10%
3	Northern Indiana Public Service Co.	$ 1,300,843,540	17.93%
4	Indianapolis Power & Light Co.	$ 1,027,360,448	14.16%
5	So. Indiana Gas & Electric Co. D/B/A Vectren	$ 426,317,624	5.88%
6	Richmond Municipal	$ 85,229,593	1.17%
7	Northeastern REMC	$ 79,715,665	1.10%
8	Anderson Municipal	$ 53,258,294	0.73%
9	Mishawaka Municipal	$ 37,571,596	0.52%
10	Harrison County REMC	$ 36,700,538	0.51%
11	Jackson County REMC	$ 35,544,981	0.49%
12	Crawfordsville Municipal	$ 30,183,155	0.42%
13	Logansport Municipal	$ 25,520,265	0.35%
14	Auburn Municipal	$ 22,285,805	0.31%
15	Frankfort Municipal	$ 20,942,873	0.29%
16	Peru Municipal	$ 15,990,724	0.22%
17	Lebanon Municipal	$ 14,297,459	0.20%
18	Marshall County REMC	$ 10,405,780	0.14%
19	Lawrenceburg Municipal	$ 9,609,786	0.13%
20	Tipton Municipal	$ 8,131,509	0.11%
21	Columbia City Municipal	$ 7,844,248	0.11%
22	Knightstown Municipal	$ 1,760,824	0.02%
23	Troy Municipal	$ 789,955	0.01%
24	Kingsford Heights Municipal	$ 575,254	0.01%
25	Straughn Municipal	$ 116,024	0.00%
	Total	$ 7,255,149,636	100.00%

Source: Data taken from 2006 Annual Reports filed with the Commission

Appendix B – Residential Electric Bill Comparison

ELECTRIC UTILITY RESIDENTIAL CUSTOMER BILLS (as of July 1, 2007 Billing)

Overall Ranking for 1,000 kWh of Consumption

Rank	Utility Name	5 Year Average	2007 Bills	2006 Bills	2005 Bills	2004 Bills	2003 Bills
1	Marshall County REMC	$ 106.28	$ 115.26	$ 115.49	$ 103.90	$ 101.65	$ 95.11
2	Northern Indiana Public Service Company	$ 98.46	$ 105.61	$ 106.35	$ 97.54	$ 91.55	$ 91.28
3	So. Indiana Gas & Electric Company	$ 90.48	$ 103.02	$ 95.25	$ 88.67	$ 87.54	$ 77.91
4	Northeastern REMC	$ 88.29	$ 96.18	$ 96.52	$ 85.51	$ 83.56	$ 79.67
5	Harrison County REMC	$ 83.49	$ 95.16	$ 87.25	$ 80.86	$ 79.11	$ 75.09
6	Duke Energy Indiana	$ 82.15	$ 90.20	$ 89.73	$ 79.53	$ 79.20	$ 72.08
7	Kingsford Heights Municipal	$ 81.09	$ 80.42	$ 85.42	$ 82.68	$ 80.21	$ 76.71
8	Jackson County REMC	$ 77.99	$ 88.54	$ 79.93	$ 75.73	$ 71.90	$ 73.86
9	Troy Municipal	$ 72.83	$ 103.02	$ 72.40	$ 62.21	$ 63.25	$ 63.25
10	Anderson Municipal	$ 72.74	$ 78.89	$ 77.00	$ 74.08	$ 67.57	$ 66.19
11	Indianapolis Power & Light Company	$ 72.10	$ 76.20	$ 78.91	$ 70.50	$ 68.92	$ 65.96
12	Crawfordsville Municipal	$ 71.97	$ 76.16	$ 75.75	$ 73.20	$ 65.58	$ 69.17
13	Richmond Municipal	$ 71.53	$ 80.17	$ 81.45	$ 72.33	$ 63.64	$ 60.04
14	Columbia City Municipal	$ 70.88	$ 76.07	$ 78.08	$ 71.86	$ 65.04	$ 63.35
15	Indiana Michigan Power Company	$ 69.38	$ 71.96	$ 69.26	$ 68.93	$ 68.34	$ 68.43
16	Peru Municipal	$ 68.91	$ 88.44	$ 68.34	$ 67.15	$ 56.44	$ 64.18
17	Straughn Municipal	$ 68.87	$ 70.98	$ 69.47	$ 73.10	$ 64.57	$ 66.26
18	Tipton Municipal	$ 68.74	$ 76.73	$ 75.48	$ 72.38	$ 60.19	$ 58.90
19	Logansport Municipal	$ 68.70	$ 74.69	$ 68.51	$ 70.44	$ 69.19	$ 60.65
20	Lebanon Municipal	$ 68.33	$ 74.41	$ 72.76	$ 69.82	$ 63.02	$ 61.67
21	Frankfort Municipal	$ 65.77	$ 71.69	$ 70.84	$ 67.05	$ 60.37	$ 58.91
22	Mishawaka Municipal	$ 65.38	$ 82.14	$ 63.40	$ 58.70	$ 66.35	$ 56.31
23	Knightstown Municipal	$ 64.11	$ 76.15	$ 66.22	$ 60.24	$ 58.08	$ 59.86
24	Lawrenceburg Municipal	$ 63.38	$ 68.42	$ 67.83	$ 66.81	$ 57.39	$ 56.44
25	Auburn Municipal	$ 45.35	$ 47.16	$ 46.38	$ 46.54	$ 42.91	$ 43.77


Natural Gas Report

2007 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. The Commission's Pipeline Safety Division regulates the infrastructure that transports the natural gas of the intrastate pipelines and local distribution companies.

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. The Commission's Pipeline Safety Division (Pipeline Safety) regulates the infrastructure that transports the natural gas of the intrastate pipelines and LDCs.

Production Overview

The production of natural gas begins with raw natural gas extracted from the wellhead. Initial purification of natural gas also 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]

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

Transporters - Pipelines

The vast majority of natural gas consumption in Indiana is from out-of-state production. In 2005, Indiana consumed approximately 530 million[2] dekatherms (Dth) of natural gas, of which roughly 3.1 million Dth[3], or less than one percent, was produced in-state. These statistics illustrate Indiana's reliance upon the transmission system to carry natural gas from the gas producing regions of the country into the state. The Gulf of Mexico produces a substantial portion of the domestic supply of natural gas. In 2005, Hurricanes Katrina and Rita heavily damaged the pipeline infrastructure and destroyed over 100 platforms.[4] The damage and destruction to the natural gas infrastructure decreased supply, which led to a dramatic spike in natural gas prices.

Interstate and intrastate pipelines carry gas from producing regions to LDCs, industrial consumers, and power generation customers. The Heartland Pipeline (discussed later) and the Ohio Valley Hub pipeline are the two intrastate pipelines under the Commission's jurisdiction. The Commission governs the pipelines' operations, services, and rates. The Heartland Pipeline runs west to east connecting the Midwestern Gas Transmission (MGT) pipeline in Sullivan, Indiana to Citizens Gas & Coke Utility's (Citizens) underground storage facility in Greene County. The Ohio Valley Hub, located in Knox County, connects with two interstate pipelines (Texas Gas Transmission and MGT) and a storage field (Monroe City Gas Storage Field). It has a storage capacity of about 2.7 million Dth and 60,000 Dth/day of firm transmission capacity.

LDCs

The Commission regulates the rates and charges of twenty-two natural gas utilities in Indiana with operating revenues totaling $2.4 billion.

Gas passes through the transmission system and enters the distribution system, where LDCs take ownership to sell and deliver to retail customers. The Commission regulates

[2] http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_VC0_mmcf_a.htm
[3] http://tonto.eia.doe.gov/dnav/ng/ng_prod_sum_a_EPG0_FPD_mmcf_a.htm
[4] http://www.gomr.mms.gov/homepg/whatsnew/newsreal/2006/060501.pdf

the rates and charges of twenty-two natural gas utilities in Indiana with operating revenues totaling $2.4 billion[6] (Appendix A). Of the regulated entities, one is a 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 remain under the jurisdiction of Pipeline Safety.[7] There are seventeen gas utilities, which are outside of the Commission's oversight for rates and charges.

The three largest IOUs providing gas service in Indiana are Northern Indiana Public Service Company (NIPSCO), Indiana Gas Company, Inc., and Southern Indiana Gas 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 both gas and electric service.

Valley Rural Utility Company is the sole not-for-profit gas utility in Indiana, providing service to a single residential development in Southeast Indiana. Citizens is a public charitable trust (treated as a municipal for regulation), serving mainly the Indianapolis metropolitan area. Aurora Municipal Gas Utility is a regulated municipal gas utility.

Customer Classes

The residential customer class consists of single-family homes and small multi-family dwellings. NIPSCO is Indiana's only LDC that provides its residential customers with the option of selecting an alternative natural gas supplier while continuing to provide the transportation service of such natural gas to the customer.

Total residential natural gas consumption fell 19.37 percent from 2002 to 2006. During this period, the residential class on average consumed approximately 147 million Dth of natural gas per year. In 2005, the average residential consumer used 87 Dth of gas for the year down from 94 Dth in 2004.[8, 9] The Residential Gas Bill Analysis, Appendix

[6] 2006 Annual Reports filed with the Commission.
[7] Pursuant to I.C. § 8-1.5-3-9
[8] http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_SIN_a.htm

B, is a snapshot of the 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 reflect current billing amounts.

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 (services as needed) or transportation service from the LDC. In 2006, the commercial class consumed approximately 71 million Dth of natural gas, a 14.39 percent drop since 2002. From 2002 to 2005, the average commercial consumer's natural gas usage dropped 12.93 percent from 549 Dth to 478 Dth.[10, 11]

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 the producer or a marketer, paying the LDC solely for the distribution costs associated with delivering the gas from the city gate to the industrial customers' facilities. In 2006, Indiana's industrial customers consumed about 254 million Dth, the fifth highest amount in the U.S.[12] On average in 2005, an industrial consumer used 45,372 Dth of natural gas.[13, 14]

[9] http://tonto.eia.doe.gov/dnav/ng/ng_cons_num_dcu_SIN_a.htm
[10] http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_SIN_a.htm
[11] http://tonto.eia.doe.gov/dnav/ng/ng_cons_num_dcu_SIN_a.htm
[12] http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_a_EPG0_vin_mmcf_a.htm
[13] http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_SIN_a.htm
[14] http://tonto.eia.doe.gov/dnav/ng/ng_cons_num_dcu_SIN_a.htm

II. EFFECTIVENESS OF REGULATION

Decoupling

Traditional Ratemaking

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.

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. Traditional ratemaking is designed so a utility captures some of its fixed costs through the volume of natural gas sold to retail customers. Therefore, a utility can recover fixed costs fully only when customers consume a certain threshold amount of natural gas as established in the utility's last rate case.

Alternatives to Traditional Ratemaking

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. This conflicts with efforts to promote energy efficiency and conservation. For this reason, the Commission has received a number of proposals to modify current rate structures. These alternative rate designs are referred to generally 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 investigation[15] into these rate design alternatives and energy efficiency measures for natural gas utilities. An order can be expected by the end of 2007.

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 changing rate design to straight-fixed variable (SFV), 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 has approved[16] a variety of decoupling mechanisms that provide for the recovery of fixed costs based on sales volumes through a periodic tracker adjustment. The Commission has also approved NTA decoupling mechanisms for many of our gas utilities.[17]

Benefits to Implementing Decoupling Mechanisms

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

[15] In Cause No. 43180, the Commission investigates rate design alternatives and energy efficiency measures for natural gas utilities.
[16] 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.
[17] 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.

- Gas utilities may develop conservation and energy efficiency programs without concerns about inadequate cost recovery.
- Conservation and 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.
- Lower debt costs may be passed along to customers through lower overall rates.
- Decoupling mechanisms may reduce the variability in customer bills by smoothing weather effects over a longer period of time.

Potential Disadvantages

There is concern that some forms of decoupling could increase rates paid by consumers. These concerns include:

- The straight-fixed variable design may require a higher service charge to recover fixed costs causing higher-than-normal bills in the summertime when natural gas usage is typically low. The overall bill impact, even if minimal, could potentially be higher.
- Under some forms of decoupling rate designs, customers are penalized for conservation efforts because the gas utility is able to increase its rates to compensate for reduced sales. This may reduce a customer's natural incentive to conserve energy in response to higher bills.
- Revenue stabilization can be viewed as a "guarantee" of recovery of fixed costs and authorized returns. Some opponents of decoupling mechanisms contend that regulated utilities are provided a reasonable opportunity, not a guarantee, to earn a profit.
- Low-income customers may be at a disadvantage to conserve and reduce the commodity or natural gas component of their bill 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 the utilities while assuring fair and equitable treatment of all natural gas customers.

Conservation

Most of the proposed or approved decoupling rate designs have included energy efficiency programs for conservation. While decoupling is not equivalent to energy efficiency, the premise of gas utilities advocating for conservation efforts leads to the issues being entwined. At least four Indiana utilities have decoupling mechanisms either proposed or approved that include energy efficiency programs, costs, and benefits.

In Indiana, oversight boards govern the energy efficiency programs. The oversight boards are comprised of representatives from various energy groups, utilities, state agencies, consumer groups, and educational institutions, including the State Utility Forecasting Group at Purdue University. The representatives on the oversight boards use a consensus decision-making process to determine the effectiveness of the implemented programs as well as the associated costs. All of the energy efficiency programs are designed with the ability to complement or combine with other energy efficiency programs within the state of Indiana.

Initially, each utility manages the administration of their oversight board. After establishment of these boards, preparation begins for competitive requests for proposals (RFP) for a third-party administrator. Designating a third-party administrator for the energy efficiency programs allows for the coordination of views and needs of the various stakeholders in developing energy efficiency initiatives. This also permits the utilities to participate actively as advocates for conservation.

The Commission is involved with each of the oversight boards. In the future, the various oversight boards may consolidate to review and evaluate the effectiveness, costs, and benefits of all energy efficiency programs statewide.

The Commission is involved with each of the oversight boards. In the future, the various oversight boards may consolidate to review and evaluate the effectiveness, costs, and benefits of all energy efficiency programs statewide. Furthermore, a unified oversight board could be managed by a state agency to ensure equal treatment for customers with various utility service needs.

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.[18] 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 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.[19] The NIPSCO program was subsequently extended for a second year. The funding for the programs is comprised of a combination of utility funds and mandatory customer contributions included in customers' bills.

Although there were direct benefits to program participants, the Commission requires more evidence that the programs benefit all customers.

The pilot programs for Citizens, Vectren, and NIPSCO were initially set to expire on December 31, 2006.[20] The programs appeared to benefit those customers who received program funds; therefore, the Commission extended the program for five months from

[18] 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.
[19] On December 15, 2004, the Commission approved a settlement agreement between NIPSCO and the OUCC in Cause No. 42722.
[20] The NIPSCO program was set to expire December 16, 2005, but extended by the Commission through December 31, 2006 in Cause No. 42927

January 1, 2007 to May 31, 2007.[21] Although there were benefits to program participants, the Commission requires more evidence that the programs benefit all customers. Thus, the Commission directed the utilities to conduct a detailed study in order to determine if the programs warrant continuance. The cases remain open and the continuation of the programs is under review by the Commission.

Price Mitigation Programs

Since the heating season of 2002-2003, the price and volatility of the natural gas market have risen to levels, which are of concern to the Commission. The Commission continues to recommend that gas utilities incorporate a diversified gas portfolio in their operations in order to mitigate price risk. Gas utilities are encouraged to thoroughly review the benefits of a diversified portfolio of fixed cost gas, storage gas (if available), spot market priced gas, and other available financial and physical hedging options to reduce volatility.

A typical portfolio may consist of a mix of spot market gas, storage gas, and fixed cost gas. Spot market gas is purchased daily on the open market at a stated price. Storage gas is purchased and placed into a storage facility for later use. Fixed cost gas is purchased by the gas utility for delivery at some point in the future at a contracted price. A fixed contract is usually short-term in nature, twelve months or less in advance of consumption.

Long-term contracts can be used to lock in the price of gas and reduce price volatility. For a time, spot market gas prices tended to be below long-term contract prices, rendering long-term contracts less attractive. Currently, the spread between long-term contract prices and spot market prices is narrower, making long-term contracts once again attractive. Thus, gas utilities may again contemplate the benefits of long-term contracts to avoid daily price volatility.

[21] Commission approved Interim Order on December 6, 2006 in Consolidated Cause Nos. 43077 and 43078.

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 and that consideration is given to all alternatives.

The Commission has indicated to the gas utilities the elements to be included in their portfolios. However, the Commission has not detailed the specific ratios of the elements to be contained in the portfolio. Given the current market environment, the Commission believes that mandates regarding specific actions for gas utilities 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 and that consideration is given to all alternatives.[22]

Adjustable Rate Mechanisms (Trackers)

An adjustable rate mechanism (tracker) allows for the timely recovery of costs that are substantially outside of the utility's ability to control. Costs recovered through a tracker are reviewed through an expedited Commission proceeding. 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. The GCA process allows a gas utility to recover on a timely basis gas costs incurred by the utility. The gas cost portion of a customer's bill is approximately 75 percent of the total.
- Pipeline Safety Adjustment (PSA) – The PSA allows the gas utility to recover prudently incurred, incremental non-capital expenses (Eligible Costs) 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 actively promote

[22] Pursuant to I.C. § 8-1-2-42(g),

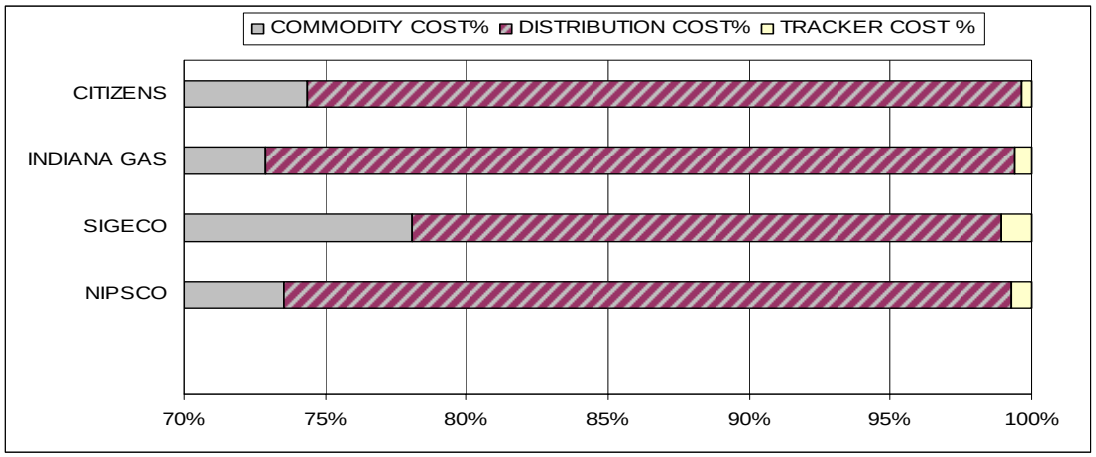
energy conservation. The SRC allows recovery of the rate case level of expenses from residential and commercial ratepayers.

- 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 bill; whereas, the distribution or fixed operational costs account for approximately 23 percent.

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 bill; whereas, the distribution or fixed operational costs account for approximately 23 percent. All of the 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



III. CHANGES IN THE INDUSTRY

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 Indiana counties of Vermillion, Parke, Putnam, Hendricks, Morgan, Johnson, Shelby, Decatur, and Franklin, respectively. The joint developers of this project are Kinder Morgan Energy Partners, L.P.; Sempra Pipelines and Storage, a unit of Sempra Energy; and ConocoPhillips.[23]

Although this interstate pipeline is not subject to the jurisdiction of the Commission, its contemplated presence is significant due to its proposed routing through Indiana and its potential to diversify Indiana's natural gas 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

[23] Preliminary Determination of Non-Environmental Issues; FERC Docket No. CP06-354

substantial price disparity between Rocky Mountain gas and gas supplies in the Eastern U.S. The proposed routing of REX through Indiana may allow the diversification of Indiana's natural gas supply. Although this interstate pipeline is not subject to the jurisdiction of the Commission, its contemplated presence is significant due to its proposed routing through Indiana and its potential to diversify Indiana's natural gas 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 is under construction with a target operation date of January 1, 2008.[24] When this segment is completed, it will extend from Colorado to Missouri. The REX-East portion of the project will be approximately 638 miles and extend from Missouri to Ohio, passing through Indiana in 2008. REX-East is the last segment of REX to be constructed with interim service expected to begin on December 30, 2008.[25] The pipeline is to be operational by June 2009.[26]

Intrastate Pipeline - Heartland Gas Pipeline

Heartland Gas Pipeline (Heartland), jointly owned by Citizens and ProLiance Energy (ProLiance), received Commission approval to: 1) construct and operate an intrastate gas pipeline; 2) implement storage and transportation agreements, rates, charges, and a service agreement for operation of the pipeline; and 3) obtain related financing.[27] The Commission also approved a storage service agreement between Citizens and Heartland. In December 2006, the Heartland pipeline went into service.

Heartland receives and delivers gas only within the state of Indiana where consumption occurs, making it an intrastate pipeline. The pipeline is approximately 25 miles long and connects the MGT pipeline in Sullivan, Indiana to Citizens' underground storage facility in Greene County.

[24] http://www.rexpipeline.com/docs/REX_West_Release_4-19-07.pdf
[25] FERC will act as the lead agency, coordinating the participation of other agencies, federal and state.
[26] http://www.rexpipeline.com/docs/04-30-07-REX-East-Filing.pdf
[27] Petition filed with the Commission on September 30, 2004, under Cause No. 42729.

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. ProLiance, Heartland's primary customer, has executed two firm transportation agreements with Heartland. The first agreement provides for firm transportation of up to 45,000 Dth per day and enables ProLiance to deliver gas to Citizens for system supply. The second agreement provides firm transportation of up to 25,000 Dth per day, which is available for use by ProLiance to market gas to other customers. The remaining firm service transportation and interruptible service may be sold to customers of Heartland other than ProLiance. Heartland also provides storage services.

Heartland provides improved access to the Chicago gas supply hub enabling ProLiance and other potential customers to diversify their gas supply and transportation capacity service options.

Heartland provides improved access to the Chicago gas supply hub enabling ProLiance and other potential customers to diversify their gas supply and transportation capacity service options. Heartland also permits ProLiance to purchase gas from Canada and the Intermountain West. Prior to Heartland, ProLiance had access to only the Gulf Coast and Mid-Continent gas supply basins. Through a Commission approved service agreement, ProLiance manages the business affairs of Heartland while Citizens administers the day-to-day operations of the facilities. Both entities are compensated for the services provided.

Ethanol Plants

Ethanol is an alcohol-based alternative fuel made from corn. Currently, Indiana has five operational ethanol plants with more than seven planned or under construction. The facilities range in capacity from 40 million gallons to 110 million gallons per year.

Overall, a 100 million gallon a year ethanol refinery will result in the utilization of an estimated four million Dth of natural gas a year.

Natural gas is a key input for the production of ethanol. Not only is natural gas used in the production of ethanol, it is also a primary ingredient in the manufacturing of fertilizer used to grow corn. An ethanol refinery that produces 100 million gallons of ethanol a year will use approximately 3.2 million Dth of natural gas a year.[28] Approximately 37 million bushels of corn are needed for a refinery to produce 100 million gallons of ethanol. This requires an additional 815,000 Dth of natural gas used for fertilizer. Overall, a 100 million gallon a year ethanol refinery will result in the utilitization of an estimated four million Dth of natural gas a year. Approximately 95 percent of U.S. ethanol plants use natural gas boilers. It is estimated that the "ethanol boom" could increase U.S. natural gas demand by as much as one percent over the next 18 to 36 months with associated increases in prices.

Ethanol plants can benefit both the local community and the gas utility providing service. Gas utilities may benefit from the large volume usage of an ethanol refinery, through increased earnings and a greater opportunity to maintain stable rates. An ethanol plant could expand the economic base of the local economy, by generating additional household income, creating new jobs, and providing new sources of tax revenue for local and state governments. Moreover, an ethanol plant could create additional revenue for local farmers by increasing demand, in most cases for corn, resulting in an estimated five to ten cents more per bushel.[29]

[28] Indiana Utility Regulatory Commission Cause No. 43298 Vectren Energy Delivery of Indiana (Vectren North) pending Rate Case
[29] www.ncga.com/ethanol/pdfs/ethanollocalcommunity.pdf

IV. COMPETITION

Competition for Natural Gas Supplies

Natural gas has increasingly become the fuel of choice for the generation of electricity, particularly during periods of peak electricity demand. In 2000, over 23,000 megawatts (MW) of new electric capacity was added in the U.S. Of this new capacity, natural gas-fired additions made up 22,238 MW, or approximately 95 percent of the total.[30] In 2005, 19 percent of the total electricity generated was produced by natural gas-fired plants compared to 15 percent in 1995.[31] The Energy Information Administration (EIA) has reported, over the next 20 years, natural gas-fired electricity generation is expected to increase dramatically as new capacity under construction becomes available.[32]

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 in the heating season.

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

[30] Source: EIA Annual Energy Outlook 2002 With Projections to 2020
[31] Source: EIA Net Generation by Energy Source: All Sectors
[32] Source: NaturalGas.org, "Electric Generation Using Natural Gas."

Table 2 - Natural Gas Consumed to Generate Electricity

	Natural Gas Consumed (Dth)	Electricity Produced (Thousand Megawatt Hours)	Total Electricity Produced (Thousand Megawatt Hours)	Percent of Total
U.S.	6,246,529,000	807,597	4,052,968	20%
Indiana	27,659,000	291	31,820	1%

Competition for Customers

Competitive Advantages of Rural Electric Membership Cooperatives

The small LDCs believe these incentives allow the unregulated rural electric membership cooperatives an unfair competitive advantage for new customers.

In November 2006, the Commission held a forum to discuss the issues and challenges facing Indiana's small LDCs. These LDCs asserted that rural electric membership cooperatives (REMCs) advertise and provide incentives to developers to exclude natural gas from residential developments by building "total electric" homes and creating "total electric" developments. Unregulated REMCs (REMCs that are not under the jurisdiction of the Commission) may recover the costs of incentives and advertising through their customer rates; whereas, regulated natural gas utilities may not recover those costs in their rates. The Indiana Administrative Code[33] governing regulated utilities prevents the recovery of advertising costs that promotes the image of the utility. The small LDCs believe these incentives allow the unregulated REMCs an unfair competitive advantage for new customers.

While electric service is a necessity in every home, natural gas is an elective option for consumers. While it is most economical for natural gas service to be included during the development phase of a residential community, inclusion of gas service is not required. These advertising and/or incentives may allegedly influence a developer's decision regarding the inclusion of gas service and limit consumers' options.

[33] Pursuant to 170 IAC 1-3

Landfill Methane Gas

Landfill methane gas, a renewable energy source, may be used as an alternative to conventional fuels such as natural gas, fuel oil, and coal.

Landfill methane gas (LMG), a renewable energy source, may be used as an alternative to conventional fuels such as natural gas, fuel oil, and coal. Currently, more than 60 U.S. organizations have converted to burn LMG in their boilers. For example, General Motors (GM) uses LMG in boilers at seven manufacturing and assembly plants nationwide, at an average yearly energy cost savings of $3,500,000. GM also reported that the total LMG used replaces more than 1.6 trillion British Thermal Unit (BTU) of fossil fuels, enough to heat 25,000 homes per year.[33] Unlike natural gas, carbon dioxide makes up about 50 percent of landfill gas. This means that LMG only burns half as hot as natural gas. Therefore, in order to burn LMG as an energy source, boilers must be retrofitted to work properly. Most commercial or industrial boilers can be retrofitted cost effectively to use LMG.

Municipal solid waste (MSW) landfills are the largest human-generated source of methane emissions in the U.S. Landfills release an estimated 38 million metric tons of carbon equivalent (MMTCE) per year, which can be detrimental to the environment. Therefore, capturing and using this gas for energy represents a new and growing technology. There are 2,300 operating or recently closed MSW landfills in the U.S., of which 400 have LMG utilization projects.[34] An estimated 560 additional MSW landfills could turn this waste into energy, enough to power approximately 870,000 homes.[35]

Natural gas utilities and LMG providers compete for large industrial and commercial customers, which have traditionally used natural gas but are beginning to utilize landfill gas. This is occurring because of the cost savings possible with LMG technology.

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[33] http://www.gm.com/corporate/responsibility/environment/news/2006/landfill_gas_041206.jsp

[34] There are a number of LMG projects in Indiana, the most recent, located in Evansville, was approved in Order #43255 on June 27, 2007. The other LMG projects approved by the Commission are under the following Cause Numbers: 40554, 41050, 41274, 42294, 41878, and 43255.

[35] NaturalGas.org: "Electric Generation Using Natural Gas."

However, most customers do not have the option of choosing LMG, because the customer must be within close proximity of a landfill to access the resource.

The implications of utilizing LMG are different for natural gas utilities and communities. When a large industrial or commercial customer switches to LMG, a natural gas utility loses a large volume consumer and the associated revenues. The loss in revenues places a burden on the existing utility customers to make up the difference in the lost revenues. Alternatively, LMG projects benefit the communities through the creation of jobs and the recycling of municipal waste into a marketable energy resource.

Choice Program

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 delivers the natural gas to customers' homes or businesses.

Currently, there are ten alternative suppliers 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, there are ten alternative suppliers registered as natural gas marketers in the NIPSCO Choice program. The Commission and NIPSCO websites list the suppliers for interested customers. As of June 30, 2007, approximately eight percent of residential customers and roughly 22 percent of commercial customers have selected alternative suppliers for their natural gas needs (Table 3).

Table 3 – Status of NIPSCO Choice Program

As of 5/31/05	Residential	Commercial
Total Customers	647,439	56,630
Choice Customers	50,051	8,729
% of Total Customers	7.7%	15.4%
As of 7/31/06		
Total Customers	647,309	55,749
Choice Customers	48,368	12,097
% of Total Customers	7.5%	21.7%
As of 6/30/07		
Total Customers	653,145	56,552
Choice Customers	50,802	12,270
% of Total Customers	7.8%	21.7%

V. EFFECTS OF LEGISLATION

State Legislation

Senate Bill 529

During the 2007 legislative session, Senate Bill 529 was signed into law. This bill requires Pipeline Safety to develop voluntary construction guidelines for all pipeline companies engaged in the construction, reconstruction, improvement, maintenance, or extension of an interstate pipeline project on privately owned land. These guidelines are developed through a public process with all interested parties given an opportunity to comment.

Indiana state agencies including the Department of Agriculture, Department of Natural Resources (DNR), and Indiana Department of Environmental Management (IDEM) were contacted and given an opportunity to comment. Three public hearings were held to allow for public comment on the proposed guidelines. In addition, established laws from Iowa and Illinois were reviewed for content.

The guidelines focus on land reclamation and soil conservation, and are to be established for the express purpose of providing a way for Hoosier landowners to simplify easement negotiations. The guidelines include rules concerning the following:

a) Minimum depth of the pipeline;
b) Separation and replacement of topsoil;
c) Removal of construction debris;
d) Prevention and alleviation of topsoil erosion and compaction;
e) Prevention and remediation of damage to underground drainage tile during construction and maintenance activities;
f) Restoring land to pre-construction conditions;
g) Compensation to landowners for damages;
h) Providing advance notice to landowners prior to construction; and
i) Indemnification of landowners against damages caused by construction activities. Statements that include rules concerning any temporary easements, tree and shrub treatment, fences and gates, livestock, and temporary roadways will be included.

The pipeline company is expected to notify landowners who will be affected by the construction under I.C. 32-24-1-1(g), and further, to provide Pipeline Safety with a list of those same landowners. The guidelines will be sent to all pipeline companies that propose to construct a pipeline in the state, with statements indicating that the state has adopted the guidelines. The Commission will also send a copy of the guidelines to all affected landowners, who are encouraged to use the guidelines to simplify easement negotiations.

Pipeline Safety is required to provide landowners with a copy of the guidelines along with several notices, which include the following:

1) A statement to indicate that the state has adopted the guidelines;
2) Notice that the guidelines have been sent to the pipeline company;
3) A toll free number for the landowner to gain information on the status of any guidelines agreed to by the company;

4) A statement to show that any guidelines agreed to by the company are non-binding on the company or the landowner, but may be used to simplify easement negotiations;
5) A statement that encourages the landowner to agree to guidelines that the company agrees to follow provided that they are not contrary to the landowner's best interests;
6) Contact information for the project coordinators designated by Pipeline Safety;
7) Contact information for FERC, including a local or toll free telephone number; and
8) The Commission's website address.

The Commission published the completed guidelines in the Indiana Register prior to the September 1, 2007 deadline.

Project Coordinators are responsible for monitoring all filings and proceedings before FERC, attending all public hearings or meetings held in Indiana that concern the project, receiving and responding to questions and complaints about the project, and updating all applicable information on the Commission website. The bill further prohibits a public utility or pipeline company seeking to acquire land or an interest in land from entering the property for examination and survey purposes, unless a notice is sent to the landowner by certified mail, or the company receives the landowner's signed consent to enter the property. The landowner is given the right to bring an action in the county circuit court to enforce this requirement and may request reimbursement for costs and legal fees. The Commission published the completed guidelines in the Indiana Register prior to the September 1, 2007 deadline.

House Bill 1722

As discussed earlier in this report, Indiana is heavily reliant upon natural gas from other regions within the U.S. House Bill 1722 takes a step toward reducing some of the state's reliance by providing incentives for investment in coal gasification plants within Indiana. Additionally, this bill provides incentives for utilities to purchase substitute

natural gas (SNG) and for the purchase of domestically manufactured energy efficient heating and cooling equipment.

Investors who build coal gasification facilities meeting the requirements are eligible for credits of ten percent on the first $500 million and five percent on any amount over $500 million.

A coal gasification power plant converts coal into synthetic gas, which can be used to fuel electric generation and/or used as SNG by end users. The bill requires that the electricity generated or the SNG produced be consumed by Indiana utility consumers. Investors who build coal gasification facilities meeting the requirements are eligible for credits of ten percent on the first $500 million and five percent on any amount over $500 million.

The bill provides cost recovery, in rates approved by the Commission, of all costs associated with the purchase of SNG. This includes the dollars associated with replacement costs above seller reimbursement, if the seller fails to deliver the SNG. If the utility does not receive the delivery from the seller, they may have to purchase gas on the spot market at potentially high prices. Therefore, cost recovery of replacement costs motivates the utility to purchase SNG.

Since Energy Star equipment uses energy more efficiently, the legislation includes incentives for taxpayers to purchase Energy Star equipment manufactured within the U.S. The bill defines heating and cooling equipment as a furnace, water heater, central and room air conditioning, and programmable thermostats. Taxpayers are eligible for a state tax credit of twenty percent of the heating and cooling equipment cost or $100 whichever is less.

Pending before the Commission is a case[37] involving Indiana Gasification's request for approval to construct, own, and operate SNG facilities in Indiana. Indiana Gasification proposes the production of SNG for sale to the four largest Indiana LDCs

[37] Pending Cause No. 43154 filed on October 27, 2006.

pursuant to 30-year, long-term contracts. Additionally, they propose the production of SNG for use by Indiana's electric utilities as fuel in the production of electricity for sale to Indiana consumers.

Federal Legislation

Federal legislation plays an important role in the operation of utilities and their infrastructure. The Pipeline Safety Act of 2002 requires extensive procedures regarding gas utility's transmission pipelines. Compliance with this Act has required gas utilities to make capital investments, which are recovered from ratepayers via Commission approved tracking mechanisms. The 2002 Act also placed requirements on natural gas operators to develop or improve outreach and public education programs. All operators are required to adopt the standard based on the American Petroleum Institute Recommended Practice 1162. This standard defines specific requirements regarding the message, methodology, and frequency of communication with target audiences. Another outcome of the 2002 Act is the establishment of a single nationwide, toll free 811 telephone number, "call before you dig", that serves each state's one-call program.

The Pipeline Integrity, Protection, Enforcement, and Safety (PIPES) Act of 2006 will impact every gas utility in the state. The PIPES Act has commissioned the Pipeline and Hazardous Material Administration (PHMSA) to create a rule by December 31, 2007, similar to the Pipeline Safety Act of 2002 except, it pertains to distribution pipelines rather than transmission pipelines. Constructed within a service area such as a city or town to deliver natural gas directly to consumers, the distribution network of a system reduces pressure from an interstate supplier. The distribution system of a natural gas utility comprises the bulk of its entire system and is far more complex. Compliance will require substantial funding, which eventually will be recovered through rates, thus increasing customers' costs. A number of provisions relating to the prevention of damage to underground facilities are also included in the PIPES Act. States with effective damage prevention programs that include enforcement of One-Call laws will be eligible to receive substantial increases in federal funding.

Indiana has an opportunity to influence the policies surrounding implementation of the many new programs created by federal statutes. Our Pipeline Safety Director (Annmarie Robertson) serves as an Officer (Vice-Chair) for the National Association of Pipeline Safety Representatives, which is an Association that supports the safe delivery of pipeline products by working closely with PHMSA, the industry, and other interested organizations. In 2008, Ms. Robertson will serve as Chair of this organization.

VI. INFRASTRUCTURE DEVELOPMENT

Liquefied Natural Gas (LNG) Facilities

In general, there are 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 its gas inventory can be withdrawn. In addition to underground storage, natural gas can be stored as LNG. LNG allows natural gas to be shipped and stored in liquid form, thus reducing the required amount of space.[38]

Cooling natural gas to about -260°F results in the condensation of gas into liquid form, known as LNG. On a national scale, LNG is imported from foreign countries to help meet growing U.S. demand and stabilize price volatility; however, its use by Indiana gas utilities is mainly for storage. Liquefaction is a useful tool when it comes to transportation and storage of natural gas because it utilizes about one six hundredth the volume of gaseous natural gas. Advances in technology are reducing the costs associated with the liquefaction and re-gasification of LNG, making it a viable storage option.

LNG may be used by liquefying gas taken from a pipeline, storing it, and re-gasifying it for pipeline distribution to customers when demand is high, such as on cold winter days.

LNG may be used by liquefying gas taken from a pipeline, storing it, and re-gasifying it for pipeline distribution to customers when demand is high, such as on cold winter

[38] www.naturalgas.org

days. These smaller re-gasification plants are often called "peak shaving plants." Alternatively, special tanker trucks transport LNG to small facilities where it is stored and re-gasified as needed. Such facilities are called "satellite plants." There are about 100 LNG peak shaving and satellite plants throughout the country.[39] Only two gas utilities in Indiana, Citizens and NIPSCO, have the ability to process and store LNG. The cost to construct a plant to convert natural gas to LNG is approximately $180 million.[40]

While there is a cost associated with the LNG process, the ability to have adequate storage and to mitigate price volatility is a benefit to all parties. One gallon of LNG equates to slightly less than one Dth. This means an average Indiana single family home would use about 17 gallons of LNG for one month of heating during the winter.

VII. Pipeline Safety

Federal Role and Organizational Structure

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 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 U.S. Department of Transportation (USDOT), OPS directly administers the program and develops, issues, and enforces minimum safety

[39] www.eia.doe.gov
[40] Brad Hubbard with Mustang Engineering located in Houston, Texas.

regulations for interstate and intrastate pipelines. These regulations are written to ensure safety in: 1) the design, construction, testing, operation, and maintenance of pipeline facilities and 2) the siting, construction, operation, and maintenance of liquefied natural gas (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., administers the grant-in-aid program to support state agencies conducting gas and hazardous liquid pipeline safety programs. The headquarters also 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 is organized as follows:

USDOT
↓
PHMSA
↓
OPS: Five Regions:

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, with headquarters in Kansas City, MO.

Indiana Pipeline Safety Program

Indiana's participation in the pipeline safety program is based on voluntary submission of a certification pursuant to Section 60105 of Chapter 601. Under a certification, the state agency assumes safety responsibility with respect to intrastate facilities over which it has jurisdiction under state law. Separate certifications are submitted for gas and hazardous liquid programs. The state agency may also adopt

additional or more stringent standards for intrastate pipeline facilities, provided such standards are compatible with federal regulations.

State agency participation may also include acting as an interstate agent on behalf of USDOT. In such cases, the state agency 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

At the beginning of 2007, there were 69 outstanding violations, which are 29, fewer than the 98 outstanding violations the previous year.

The Pipeline Safety division administers the Indiana Pipeline Safety program, established by statute[41]. 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. Inspection types may include operating procedures, operating records, specialized inspections, follow-up inspections, field inspections, operator training, or any combination of these. In 2006, Pipeline Safety conducted 459 distribution inspections and 91 transportation inspections. When probable violations are discovered, a written notice is sent to the operator and additional enforcement pursued when necessary. During 2006, the Pipeline Safety division resolved 137 probable violations. At the beginning of 2007, there were 69 outstanding violations or 29 fewer than the 98 outstanding violations the previous year.

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 is completed for each investigation.

[41] I.C. 8-1-22.5

As part of their responsibilities, Pipeline Safety promotes the prevention of damage to underground facilities and participates in Indiana One Call activities. It also promotes the education of public and emergency officials and emergency responders in recognizing, reporting, and responding to gas-related emergencies. 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).

While in the recent past, local gas drilling and production activity have been limited due to its cost, current market conditions make the use of locally produced gas more cost-effective. As a result, the DNR Oil and Gas Division has issued over 400 permits to drill for gas or oil in Indiana. Pipeline Safety staff has the responsibility to monitor these activities and to appropriately determine jurisdictional authority, classify, and establish an inspection plan for any new facilities. To accomplish this, Pipeline Safety has established a working relationship with DNR's Oil and Gas Division by working cooperatively to ensure that production, gathering, transmission, and distribution of these products are properly regulated and monitored. Many of the entities engaged in gas or oil production are not aware of the requirements and responsibilities associated with acting as a gas or hazardous liquids operator. Considerable resources are being dedicated to reach out to these operators and to require compliance with the standards found in state and federal regulations.

VIII. NATURAL GAS INCIDENT

Huntington, Indiana

In Huntington, Indiana on November 20, 2006, a cable television employee pierced the gas line serving the home by driving a grounding rod through it. The cable employee notified Vectren, which is the gas company that provides service in the area. A Vectren representative arrived shortly after being called to the scene. Unfortunately, the house exploded due to gas escaping from the underground leak and migrating into the home.

Two people were killed, including the Vectren employee and one of the residents: two other individuals were hospitalized with serious injuries.

Pipeline Safety is conducting a comprehensive investigation of this incident, and also acting on behalf of the National Transportation Safety Board as part of its role in this investigation. The purpose of the investigation is to establish cause, determine if any pipeline safety violation occurred that contributed to the incident, take appropriate action, and make recommendations to prevent future similar instances.

It is clear that this incident would not have occurred had the cable television employee not driven a ground rod into the gas line. Indiana's existing One Call law, I.C. 8-1-26, does not include driving or pounding of objects into the ground in the definition of excavation; therefore, no locate request was required by law. Until this definition is updated to include these activities to require facility locates, Indiana remains vulnerable to future incidents of this nature.

IX. APPENDICES

Appendix A – Gas Utility Revenues

Gas Utility Revenues
Year Ended December 31, 2006

Utility Name	*Revenues	Pecentage of Total Revenues
Northern Indiana Public Service Co. - Gas	$ 908,745,508	37.71%
Indiana Gas Company, Inc.	739,160,660	30.68%
Citizens Gas & Coke Utility	397,034,732	16.48%
Southern Indiana Gas and Electric Company - Gas	133,386,376	5.54%
Northern Indiana Fuel & Light Co., Inc.	53,523,456	2.22%
Kokomo Gas and Fuel Company	44,455,536	1.84%
Ohio Valley Gas Corporation	38,302,605	1.59%
Midwest Natural Gas Corporation	22,374,900	0.93%
Lawrenceburg Gas Company	14,625,990	0.61%
Indiana Natural Gas Corporation	11,066,224	0.46%
Community Natural Gas Co., Inc.	8,450,149	0.35%
Ohio Valley Gas, Inc.	6,775,927	0.28%
Fountaintown Gas Company, Inc.	5,954,747	0.25%
Indiana Utilities Corporation	5,822,234	0.24%
Boonville Natural Gas Corporation	5,088,417	0.21%
Citizens Gas of Westfield	4,441,998	0.18%
Aurora Municipal Gas Utility	4,004,577	0.17%
South Eastern Indiana Natural Gas Co., Inc.	2,584,122	0.11%
Switzerland County Natural Gas Co.	2,068,775	0.09%
Chandler Natural Gas	1,367,492	0.06%
Valley Rural Utility Company	320,940	0.01%
Snow & Ogden Gas Company, Inc.	11,433	0.00%
	$ 2,409,566,798	100.00%

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

Appendix B – Residential Gas Bill Analysis

RESIDENTIAL GAS BILL ANALYSIS (2003-2007)

BILLS CALCULATED BASED ON RATES IN EFFECT JANUARY FIRST OF EACH YEAR

RANKED HIGHEST TO LOWEST BASED ON 5 YEAR AVERAGE

		Consumption Level of 200 Therms					
Rank	Utility Name	5 Year Average	2007 Bills	2006 Bills	2005 Bills	2004 Bills	2003 Bills
1	Lawrenceburg Gas Co. (Rate G-1)	245.21	264.60	343.38	248.34	213.09	156.64
2	Aurora Municipal Gas Utility	238.74	261.15	338.94	240.59	205.25	147.77
3	Boonville Natural Gas Corp.	238.70	295.50	310.11	219.08	196.18	172.63
4	Lawrenceburg Gas Co. (Rate G-2)	235.91	242.82	365.58	221.12	211.84	138.18
5	Ohio Valley Gas Corp. (TXG)	233.48	280.18	286.74	235.80	220.18	144.48
6	Indiana Utilities Corp.	233.44	277.87	290.98	238.26	209.20	150.89
7	Switzerland County Natural Gas Co.	233.17	292.82	382.34	173.19	173.19	144.31
8	Ohio Valley Gas Corp. (ANR) (2)	230.26	269.02	264.24	227.40	225.70	164.94
9	South Eastern Indiana Gas Co.	229.36	271.62	266.45	250.45	211.19	147.09
10	Ohio Valley Gas Inc.	224.85	268.60	276.84	217.56	223.52	137.72
11	Indiana Natural Gas Corp.	224.23	255.25	301.16	204.41	208.96	151.36
12	Peoples Gas and Power Co.	222.79	266.02	303.94	206.02	216.02	121.94
13	Community Gas Corp. (Rate 1) (1)	219.54	259.70	286.17	206.08	199.96	145.77
14	Chandler Natural Gas Corp.	215.10	272.24	292.09	191.54	171.08	148.57
15	Community Gas Corp. (Rate 2) (1)	215.05	259.70	286.17	206.08	199.96	123.33
16	Midwest Gas Corp.	214.73	255.12	293.04	195.12	205.12	125.25
17	Indiana Gas Co.	212.53	222.64	289.58	209.70	179.40	161.32
18	Westfield Gas Corp.	212.06	231.35	262.97	193.87	204.97	167.15
19	Fountaintown Gas Co.	209.85	284.26	240.55	239.98	139.58	144.86
20	Northern Indiana Public Service Co.	207.42	181.64	295.08	199.70	181.31	179.35
21	Southern Ind. Gas & Electric Co.	194.32	208.34	290.30	171.72	154.84	146.42
22	Citizens Gas and Coke Utility	194.67	225.38	242.99	190.49	167.85	146.66
23	Northern Indiana Fuel and Light Co.	184.36	201.15	220.71	187.95	170.11	141.90
24	Kokomo Gas and Fuel Co.	179.52	189.58	227.66	182.98	165.80	131.60
25	Snow and Ogden Gas Co.	119.36	148.10	148.10	100.20	100.20	100.20

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. Valley Rural Utility Co. began natural gas service in July 2003; therefore, the utility is not included in the 5-year average because there is not enough data at this point.

Appendix C – Residential Gas Bill Analysis - Annotations

*AREAS SERVED

Community Natural Gas

Rate 1

Serving: Dale, Mariah Hill, Santa Claus and Gentryville.

Rate 2

Serving: Owensville, Cynthiana, Holland, Worthington, Carlisle and Spencer

Lawrenceburg Gas

Rate G-1; Lawrenceburg Division

Serving: Greendale, Lawrenceburg, Rising Sun and West Harrison.

Rate G-2; Brookville Division

Serving: Brookville.

Ohio Valley Gas Corp.

ANR Consolidated Area

(**Formerly ANR;** ANR Pipeline System)

Serving: Ferdinand, Pennville, Portland, St. Anthony, St. Marks and St. Meinrad.

(**Formerly PE**; Panhandle Eastern Pipeline System)

Serving: Deerfield, Fountain City, Lynn, Ridgeville, Saratoga, Union City and and Winchester.

TXG; Texas Gas Transmission System

Serving: Cannelton, Connersville, Everton, Guilford, Lawrenceville, New Alsace, Sunman, Tell City, Troy and Yorkville.

Ohio Valley Gas, Inc.

Serving: Dugger, Farmersburg, Hymera, Riley, Shelburn, Sullivan and Winslow.

1) Community Natural Gas Rate 1 and Rate 2 were consolidated pursuant to Commission order in Cause No. 42452 dated 11/20/03.

2) Ohio Valley Gas "ANR" and "PE" service areas were consolidated pursuant to Commission order in Cause No. 40049 dated 11/09/95. The consolidated area was named "ANR" to distinguish it from the "TXG" service area.

3) Valley Rural Utility Co. began natural gas service in July 2003. Not included in the 5 year average because there is not enough data at this point in time.


Communications Report

2007 COMMUNICATIONS REPORT

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I. COMMUNICATIONS OVERVIEW

The communications environment has rapidly evolved around the nation and in Indiana. In 2006, the Indiana General Assembly passed House Enrolled Act 1279 (HEA 1279), which resulted in significant changes to telecommunications regulation, including video services for Indiana's telecommunications market. The statute envisioned innovation and technological growth in an increasingly competitive environment. The role of the Indiana Utility Regulatory Commission (IURC or Commission) is to continue to manage and implement these changes while balancing the interests of the industry and consumers.

The IURC continues to implement its duties to provide predictability and guidance to industry stakeholders and consumers alike.

The video franchising framework designed by the Indiana General Assembly is an example of new opportunities created by the statute, where all industry participants are able to compete with one another under similar rules. The IURC has facilitated an expedited process that preserves the benefits of video franchising for local communities around Indiana, while making market entry efficient, certain, and easy. The IURC has also engaged in similar activities related to other matters as required by HEA 1279 that provides predictability and guidance to industry stakeholders and consumers alike.

II. BROADBAND DEPLOYMENT, DATA COLLECTION AND REPORTING

BROADBAND AS A POLICY PRIORITY

Just as telephone service changed how people communicated, broadband is shaping the next trend in communication services.

Broadband policy has been a priority for both federal and state leaders for the last decade. Broadband has been recognized as a vital component of economic development and social well-being of our state and nation. Throughout this report we discuss aspects of the landmark legislation passed by the Indiana General Assembly to promote the increased availability of broadband in Indiana. As discussed later in the sections on telecommunications competition and video competition, broadband technology enables a

number of services that improve consumers' access to forms of communications, information, commerce and entertainment.

In 2006, HEA 1279 defined certain reporting requirements for the IURC. In pertinent part, the statutory requirements read:

> (c) "… prepare for presentation to the regulatory flexibility committee a report that includes the following:
>
> > (1) An analysis of the effects of competition and technological change on universal service and on pricing of all telecommunications services offered in Indiana."[1]

The IURC believes the most important elements to report on are broadband services and Basic Telecommunications Service (BTS). Therefore, they are the focus of our analysis.

In the course of fulfilling our new reporting responsibilities, the Commission held two collaborative workshops with incumbent local exchange carriers (ILECs), cable providers, mobile wireless providers, industry associations, and the Office of the Utility Consumer Counselor (OUCC). During these sessions, many industry representatives suggested that the IURC use Federal Communications Commission (FCC) data as an appropriate means to obtain certain data regarding broadband availability and connections. The FCC uses its own format to collect such data, but one complicating factor is that the FCC's "definition" of broadband is vastly different than that contained in HEA 1279. The FCC discusses internet speeds that "**exceed 200 kilobits per second (kbps) <u>in at least one direction</u>**…"[2] While the FCC information can be useful, the IURC is continuing to assess and reconcile where Indiana's market actually is in relation to many of the robust applications and rapid technological changes that we see.

BROADBAND DEFINITIONS

Consumer expectations continue to evolve as technology becomes more complex.

Broadband is generally understood in terms of a minimum data transfer rate or speed. However, today there is not a single, universally agreed-upon definition of "broadband"

[1] I.C. 8-1-2.6-4(c)(1).
[2] FCC Form 477, Instructions for March 1, 2007 Filing (of data as of 12/31/06), Section II, p. 1.

in terms of data transfer rates. In a year 2000 report to Congress, the FCC stated it originally chose 200 kbps as a threshold characteristic to define broadband because it was viewed as being fast "enough to provide the most popular applications -- to change web pages as fast as one can flip through the pages of a book."[3]

Consumer expectations have evolved substantially beyond satisfaction with merely being able to change web pages. As content becomes more complex, the speed required to perform the task described by the FCC in its 2000 report may not be sufficient, as an information transfer rate of 200 kbps results in extremely long delays in transmitting information.

The Indiana General Assembly did not establish a general definition for "broadband"; however, it did link the offering of broadband service to the ability to increase rates for BTS. Broadband service under the statute includes a "connection to the internet that provides capacity for transmission at an average speed of at least one and one-half (1.5) megabits per second downstream and at least three hundred eighty-four (384) kilobits per second upstream, regardless of the technology or medium used to provide the connection."[4] This definition requires download speeds seven and one half times faster than the FCC definition and requires a minimum upload speed, which the FCC definition does not. The minimum upload speed required in the statute is even faster than the FCC's minimum download speed.

The FCC definition of broadband is far too slow to meet consumer expectations. Therefore the IURC attempted, through its survey, to gather information on that are meeting the definition in HEA 1279.

CHALLENGES OF OBTAINING DATA FROM PROVIDERS

The changes in the IURC's jurisdiction over telecommunications companies have altered the type of information the IURC needs to obtain from providers. The IURC

[3] Federal Communications Commission, "Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996," 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 [Hereinafter, Second Report].
[4] I.C. 8-1-2.6-1.3(a).

identified and sought to meet with all known (voice and data) telecommunication and video carriers providing service in the state through two collaborative workshops.

Workshops

The primary objective of the collaborative workshops was to enable the IURC to provide a thorough analysis of the competitive landscape in Indiana. The approach was three-fold in principle: (1) outline the legislatively mandated information; (2) obtain the carriers' assistance in designing a data gathering instrument; and (3) gain insight into service availability data.

The IURC requested assistance from both regulated and non-regulated industry representatives through partnership in the development and construction of a data gathering instrument such as a survey. The IURC conducted two workshops and exchanged several drafts of the resulting survey with participants. The IURC also attempted to follow-up with some participants that did not respond.

The resulting survey sought to gather information in three major divisions:

1) Survey of Telecommunications Services – The survey inquired about BTS because the IURC was directed by HEA 1279 to provide an analysis of the effects of competition and technological change on universal service and on pricing of telecommunications services.

2) Survey of Video Services – The survey inquired about video services because the IURC was directed by HEA 1279, to report on the effects of competition and technological change on the availability of video services in Indiana. This survey was intended only for those entities providing video service according to the definition of video service contained in HEA 1279.

3) Broadband Survey - As part of its analysis of the effects of competition and technological change on universal service and on pricing of telecommunications services, the IURC sought information on broadband deployment in Indiana.

Some companies were resistant to providing information to the IURC regarding services that were not clearly under the IURC's jurisdiction.

During the workshops, it became readily apparent that some companies were resistant to providing any information to the IURC regarding services that were not clearly under the IURC's jurisdiction. In response to the IURC staff's questions regarding broadband and its availability, carriers continually referred staff to the FCC Form 477 data (which uses the FCC's slower definition of broadband). However, this data set is only available through a cooperative agreement with the FCC and currently contains data only through June 2006.

Certain cable and wireless providers refused to provide data in response to IURC collection efforts.

Non-responsiveness

Through correspondence, voice messages, or their refusals to respond to contacts from the Commission staff, Comcast, Time Warner Cable, Insight, and Brighthouse have indicated that based on advice from the Indiana Cable Telecommunications Association (ICTA), the IURC has no jurisdiction over broadband service, so the companies would not provide responses to the IURC's broadband survey or the FCC data for July-December 2006. The three largest wireless companies in the state, Sprint Nextel, Cingular (d/b/a AT&T Mobility), and Verizon Wireless also declined to provide the July-December 2006 FCC data that staff requested, though some had indicated the intent to cooperate. This lack of information regarding broadband provision by some providers for half of 2006 has prevented the IURC from showing a complete picture of broadband availability at any speed as of December 31, 2006.

It is important to note that the IURC had to assure the FCC that the Commission would afford protection of all Form 477 data before the FCC would make that data available. Although this same assurance was provided by the IURC directly to providers, no FCC data has been submitted to the IURC by the aforementioned carriers.

BROADBAND DEPLOYMENT STATISTICS AND DATA COLLECTION METHODOLOGY-

Unless otherwise noted, the following charts and graphs related to broadband deployment are based upon FCC data. This data uses the FCC's definition of broadband which is at least 200 kbps in at least one direction.

While the number of connections in Indiana has consistently lagged behind the U.S., the gap has been steadily narrowing each year.

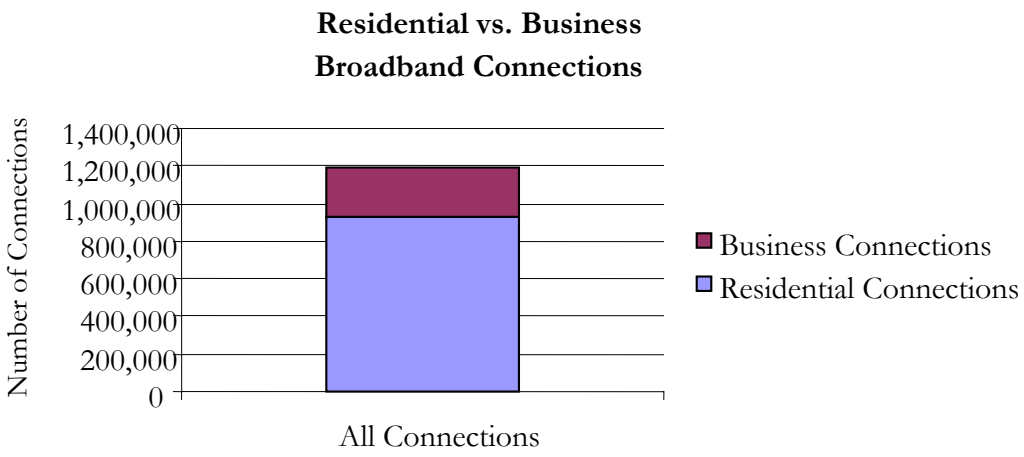
Indiana has consistently lagged behind the U.S., in the number of broadband lines deployed per 100 persons. However the gap has been steadily narrowing each year.

While Indiana may have fewer broadband lines per capita, the speed is greater.

Indiana has a higher percentage (53.01%) of its total broadband lines operating at a rate exceeding 200 kbps in one direction and between 2.5 Mbps and 10 Mbps in the other direction than the U.S. as a whole (45.67%). This is good news for consumers because this indicates that while Indiana may have fewer broadband lines per capita, the speed of the lines that we have is greater than the U.S. average.

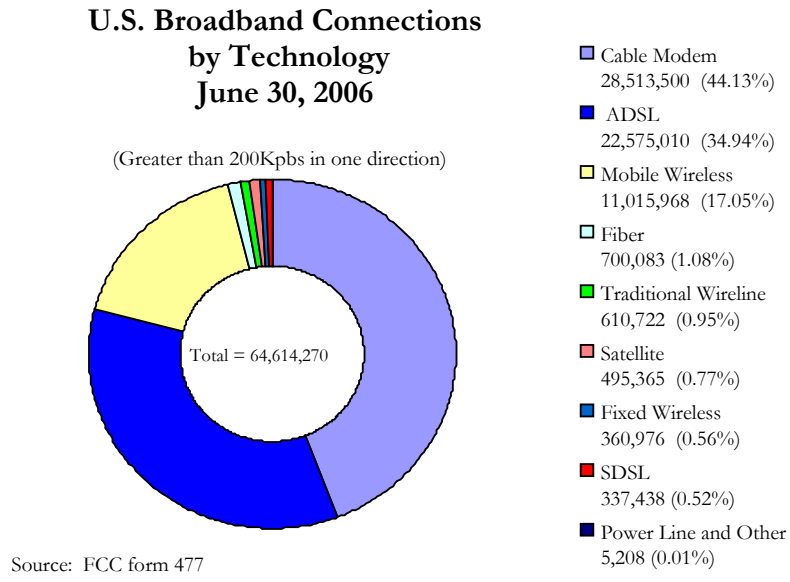
As of June 30, 2006, residential broadband connections with a transfer rate exceeding 200 kbps in at least one direction far outnumbered their non-residential counterparts in Indiana.(Chart 1, below). For instance, in large businesses, internet traffic for multiple users is typically aggregated through some type of local area network. Under this scenario, the network serves the *entire* business but counts as only one connection.

Chart 1



According to FCC data, and as illustrated by Chart 2, as of June 30, 2006, cable modem service accounted for 44.13% of the 64,614,270 total U.S. broadband connections. Asynchronous Digital Subscriber Line (ADSL), a service that provides a faster internet connection for downloading content, 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.

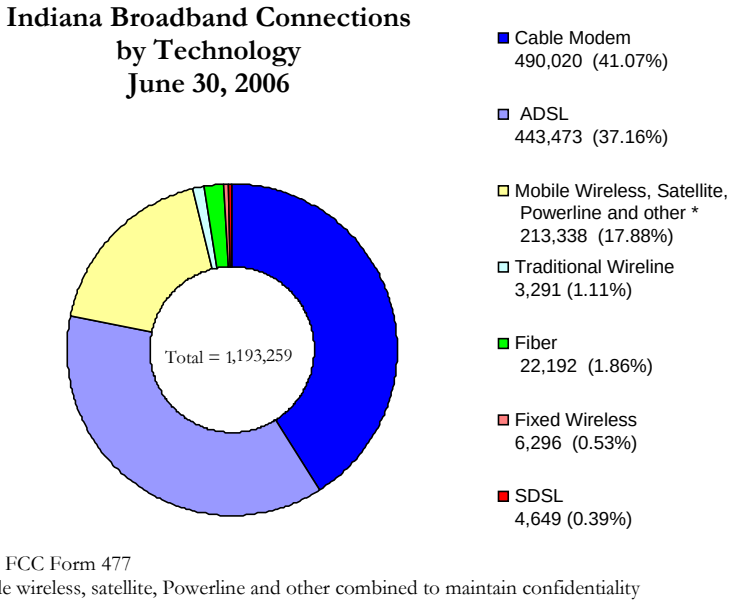
Chart 2



Source: FCC form 477

According to FCC data, and as shown by Chart 3, as of June 30, 2006, in Indiana, cable modem service accounted for 41.07% of the 1,193,259 total IN broadband connections. ADSL made up 37.16% of the total. Mobile wireless, satellite, broadband over power lines (BPL), and "other" are aggregated into a single category. This aggregated category accounted for 17.88% of the total Indiana broadband connections.

Chart 3



Source: FCC Form 477
* Mobile wireless, satellite, Powerline and other combined to maintain confidentiality

Table 1 below provides information on how many broadband providers are providing service in the 992 zip codes in Indiana. The information is shown by the percentage of zip codes that have different numbers of broadband providers serving at least one customer in a particular zip code.

Table 1

Number of Providers in Indiana Zip Codes

Number of Service Providers	Percent of Zip Codes
0	1%
1-3	25%
4 or more	74%

Source: High-Speed Services for Internet Access: Status as of June 30, 2006, FCC Industry Analysis and Technology Division – Wireline Competition Bureau, January 2007, Table 17.

III. VIDEO STATUTORY REPORTING REQUIREMENTS[5]

Before July 1, 2006, video services in Indiana were provided by firms granted permission (a franchise) by local franchise authorities (LFAs) in defined and discrete geographic areas across the state. These franchise areas typically covered areas of high population density (e.g. cities and towns) and the surrounding areas. As discussed in greater detail below, Indiana customers predominately had only one land-based video service provider (VSP) available to them. In other words, there was limited head-to-head and/or direct competition in the video service market.

The video service franchises issued by the Commission have primarily been to existing video service providers.

HEA 1279 was created in part to increase the availability of video services. However, since July 1, 2006, the availability of video services does not seem to have increased. Thus far, the video service franchises issued by the Commission (16) have primarily been to existing VSPs who have chosen to terminate their locally-issued franchise and obtain a state-issued franchise. Relatively few (6) new providers of video service have obtained a state-issued video franchise. A number of these are incumbent

[5] As required in I.C. 8-1-2.6-4(c)(2)A-C

telephone providers which have received authority to provide video services within the boundaries of their telephone service area.

VIDEO FRANCHISES IN INDIANA

As of July 1, 2007, there were 31 VSPs in Indiana. 14 out of the 31 are rural local exchange telephone companies. Further, of the 31 VSPs 16 have received a state-issued video franchise. Six of these 16 companies with state-issued franchises are new providers and two are existing providers with state authority to provide service in a new area. The other eight state franchises were issued to existing cable providers which chose to terminate their existing local franchise agreements. (See Table 2, below)

Table 2

State-Issued Certificates of Franchise Authority
As of 6/30/07

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	09/13/06	New	Not yet offering service
Charter Communications	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	Not yet providing service
Verizon North Inc.	12/20/06	New	7/17/07
Adams Wells TV	02/07/07	New	Not yet providing service
Bright House Networks, LLC	02/28/07	Existing	
Sigecom, LLC	01/24/07	Existing	
Endeavor Communications	03/14/07	New	3/14/07
WOW! Internet, Cable and Phone	03/22/07	Existing	
Automated Data Systems, Inc. d/b/a Accelerated Networks, LLC	06/06/07	New	Not yet providing service

VIDEO AVAILABILITY IN INDIANA AS OF DECEMBER 2006

Data gathered from the providers does not indicate the availability of video service in any zip code that did not already have it prior to June 30, 2006.

All 92 counties in Indiana have at least one video provider that covers at least a portion of the county, but only seven counties have county-wide video coverage.[6] 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", other 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, 2006 video service was unavailable in about one third of the zip codes in the state, and no carrier began offering service in any zip code that did not already have video service prior to the passage of HEA 1279.

Table 3 indicates the number of VSPs offering service in the 92 counties of the state. However, this does not mean that there is head-to-head competition in the counties where there are multiple providers, as the VSPs may have completely separate service territories within the county. See Appendix 1 for a list of providers by County.

Table 3
Indiana Counties and Number of Active Video Providers

18 counties	1 VSP
27 counties	2 VSPs
31 counties	3 VSPs
11 counties	4 VSPs
5 counties	5 VSPs

Source: FCC Database and IURC staff research

Technologies used to provide video service to Indiana customers

The technologies used to provide video service across Indiana vary among providers. For example, some providers are using co-axial cable while others are using 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

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

video providers, in contrast, are using either all fiber or a combination of fiber and copper to provide video service. AT&T with its U-verse™ product is an example of a provider using Voice over Internet Protocol (VoIP) technology. This service is similar to the internet in that the consumer views the programs that are available to them, and then downloads only the programs they want. In contrast, Verizon does not use VoIP technology, but provides a complete selection of programs to the home, enabling the consumer to make the selection at the TV set.

COMPETITION IN VIDEO SERVICES MARKET

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, video service was provided by companies such as cable companies that possessed locally-issued franchises. 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. However, some local franchising authorities did grant multiple providers authority to provide service in the same geographic area. These multiple franchises resulted in head-to-head competition.

Areas in which there was direct competition for video services included parts of Evansville, Hancock County and in a few small towns across the state. The entities competing head-to-head included cable television companies, affiliates of small rural telephone companies and electric utilities. Specifically, the Commission is aware of 16 companies that provided video service and were competing in various locations around the state prior to the passage HEA 1279. However, the Commission's information regarding video competition prior to the passage of HEA 1279 is limited, because the IURC has only just started to collect data concerning video services.

Since the passage of HEA 1279, additional head-to-head and/or direct video service competition has been slow to develop in Indiana.

The Commission has issued numerous state video franchises from July 1, 2006, through December 31, 2006 including 25 franchises to 10 different companies, many of which were existing cable companies operating in the state. While HEA 1279 has attempted to provide the means for increased competition, new competitors have been

somewhat slow to emerge in Indiana. While existing providers would not be expected to expand their networks immediately, the fact remains that these state-issued franchises have not yet resulted in an increase in video competition since HEA 1279 took effect.

As of December 31, 2006, only two new video providers were actively competing head-to-head for customers in Indiana.

According to information that companies provided to the Commission, as of December 31, 2006, two new video providers were actively competing head-to-head for customers in Indiana. Further, these two new video competitors were active at year-end in only 5 of the 992 zip codes throughout the state. It is important to remember that upgrades of existing networks and build outs of new networks take time, so it could be reasonable to expect that new VSPs will eventually expand their coverage areas.

Additional Providers in 2007

However, since the time period covered by the video survey (year ended December 31, 2006), the Commission has received a few new applications from providers that do not currently provide video service under a locally-issued franchise. Since January 1, 2007, the Commission has approved six additional applications for video franchises.

The Commission expects to see the competitive effect of AT&T's U-verse™, Verizon's FiOS TV™ and other new video franchises during the upcoming year and into the future.

Also, some of the new providers who received a state-issued franchise are beginning to provide or expand their provision of service in their authorized territories. These carriers do represent new direct competition in the video services market in Indiana. Two examples of this are AT&T's U-verse™ and Verizon's FiOS TV™. The Commission expects to see the effect of these and other new video franchises during the upcoming year and will continue to monitor the level of video service competition for reporting in next year's report.

EFFECT OF COMPETITION ON THE PRICING AND AVAILABILITY OF VIDEO SERVICE

Given the limited amount of head-to-head competition in Indiana, it is premature to draw any conclusions about what effect competition has on the pricing and availability of video services.

IV. INFRASTRUCTURE INVESTMENT

Economic development for Indiana communities is dependent upon the availability of state of the art high-speed broadband services.

Economic development for Indiana communities is dependent upon the availability of state-of-the-art high-speed broadband communications services. One of the largest impediments to the deployment of these services in Indiana is the high cost of infrastructure, which affects large and small providers alike. The legacy copper network of the phone companies, without upgrades, cannot sustain the broadband speeds required to provide both data and video service.

Infrastructure Investments have the potential to expand competition in the market.

As previously mentioned, AT&T and Verizon are two examples of companies that have deployed and plan to deploy extensive infrastructure in the state. AT&T announced its plans to invest from $4 to $6 Billion nationally[7], including $250 million being invested in Indiana[8], from 2005 through 2007 on network upgrades to implement its Project Lightspeed. Verizon has projected spending approximately $18 Billion in net capital between 2004 and 2010 to implement FiOS nationally[9], including more than $75 million invested in FiOS in Fort Wayne, Indiana[10]. These types of investments have the potential to expand competition in the market.

Smaller companies that choose to make these same types of capital investments by utilizing programs such as RUS loans and Universal Service funds, find that they have an additional hurdle to overcome. Programming is a very big issue for small video

[7] Source: http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=21458.
[8] Source: http://www.insideindianabusiness.com/newsitem.asp?ID=18245.
[9] Sources: http://newscenter.verizon.com/press-releases/verizon/2006/verizon-provides-new.html
[10] "Verizon to enter cable TV market next year", Fort Wayne News Sentinel, November 28, 2006.

providers. Small providers find it very difficult to obtain programming for their video systems at a cost at or near that paid by large Multiple System Operators (MSOs)[11] like Comcast, Time Warner or Insight. There is no incentive to provide programming to these small carriers at a price that enables them to be competitive. There is at least one small video provider in Indiana who has obtained a state video franchise but has not started to provide service for this reason.

Despite these cost-related issues, there are several examples of small rural incumbent local exchange carriers (RLEC) and municipalities that have been able to deploy the infrastructure needed to provide state-of-the-art high-speed broadband communication and video services to their customers. Many of them are now able to offer their customers the "triple play": a combination of voice, video and high-speed internet service. The table below indicates the RLECs and municipalities that are offering or will soon be offering the triple play to their customers. Additional details regarding specific success stories of infrastructure and services deployed by some companies are included in Appendix 2.

[11] A Multiple System Operator (MSO) is an operator of multiple cable television systems.

Table 4
RLECs and Municipalities that Have Deployed Infrastructure to Provide High-Speed Services

Company	Telephone Service	Video Service	High-speed internet service
Citizen's Telephone	X	X	X
Clay County Rural Coop.	X	X	X
Craigville Telephone Co.	X	Fall 2007	X
Daviess-Martin RTC	X		X
Enhanced Communications	X	X	X
Hancock Telecom	X	X	X
Ligonier Telephone	X	X	X
Mulberry RTC	X	X	X
New Paris Telephone Co	X	Quality Cablevision	X
Perry-Spencer Rural Telephone Co-op, d/b/a PSC	X	X	X
Pulaski-White RTC	X		X
Rochester Telephone Co.	X	X	X
Smithville Telephone	X	X	X
Swayzee Telephone	X	X	X
Sweetser Telephone	X	Oak Hill Cablevision	X
Tri-County Telephone	X	X	X
Washington County Rural Telephone Co-op, d/b/a Tele-Media Solutions	X	X	X
Municipality			
Accelplus (City of Crawfordsville)		X	X
Lebanon			X
South Bend			X

V. EFFECTIVENESS OF REGULATION

CHANGES PURSUANT TO 1279

Basic Telecommunications Service/ Alternative Regulation Plans

The passage of HEA 1279 in March of 2006 marked the most sweeping regulatory change to the telecommunications environment in Indiana since the passage of the federal Telecommunications Act of 1996 (TA-96). HEA 1279 declared that there is full and fair competition in the telecommunications market in Indiana and stated that "after March 27, 2006 the commission shall not exercise jurisdiction over any non-basic telecommunications service". Basic telecommunications service (BTS) is the one service for which regulation was retained for a limited period. It is defined in the legislation as stand-alone telephone exchange service that is provided through the primary line; is the sole service purchased by the customer; is not a part of any package, promotion or contract; and is not offered at a discounted price.[12]

The legislation includes an exception to this broad withdrawal of regulatory authority for companies that had alternative regulatory agreements approved by the Commission under I.C.8-1-2.6 before July 29, 2004.[13] This section of the statute made clear that any such agreement was not terminated or modified; however, upon the request of the parties, a qualifying agreement could be renegotiated. The providers affected by this exception are AT&T, Verizon and Embarq. AT&T's agreement expired on June 30, 2007. Verizon's agreement expires on December 31, 2007. The Commission and Verizon however, are in the midst of renegotiating their agreement because of the systemic service quality problems that Verizon experienced over the last 18 – 24 months in certain areas of their service territory. Embarq has requested early termination of its agreement which has an expiration date of December 31, 2008. Both Verizon's and Embarq's cases are pending before the Commission.

[12] I.C.8-1-2.6-0.1.
[13] I.C.8-1-2.6-12.

Monitoring, Tracking, and Reporting Responsibilities

The existing responsibilities for the Communications Division have evolved since the passage of the Telecommunications Act of 1996 (TA-96) and more recently, HEA 1279. No longer is division work driven by traditional rate regulation. Rather, the work has morphed into analysis and evaluation, with significant economic and policy components. As long ago as the passage of TA-96, the Division had seen fewer rate cases, because they had been replaced with various forms of alternative regulation and pricing flexibility plans. The new state law has further defined the Division's role in several other areas as well. While some of the traditional rate-setting work was eliminated by HEA 1279, other areas have emerged including video franchising, streamlined CTA procedures and provider of last resort (PoLR) processes for carriers.

Monitoring and tracking of data is essential to provide a true picture of competitive trends in the communications market.

The Commission gathers and tracks data on a quarterly basis regarding the changing service areas for video providers with state issued franchises, and monitors providers continuing to operate under local franchises. The Commission also gathers and tracks data regarding voice, video and broadband services, provided in Indiana through an annual survey as well as frequent review of data reported to the FCC. This function is essential if the Commission is to provide the General Assembly with a true picture of the trends in the different sectors of the communications market and the effects of competition on the market as a whole.

Federal Responsibilities

While the priority is state-specific work, Indiana has obligations that extend beyond her borders.

The IURC has always been an active participant in various economic policy-related issues at the federal level, particularly at the FCC. HEA 1279 appropriately preserved this role. Each state commission, including the IURC, has specific responsibilities that arise from federal law. While the first priority is for resolution of state-specific work and

cases, the IURC remains committed to meeting its significant federal policy and legal obligations.

The breadth of the Commission's participation includes, but is not limited to various policy advisory roles at the FCC regarding Universal Service issues and other cost accounting matters. Additionally, the Commission is active on various task forces through the National Association of Regulatory Utility Commissioners (NARUC) which assists in the development of national communications policies. When appropriate, the IURC provides comments and feedback on proposed rulemakings at the FCC and works directly with Indiana's congressional delegation in order to provide unbiased, neutral policy analyses on proposed communications-related issues and legislation. These federal and/or national activities have a direct impact on the State in terms of economic development. These activities, together with the Commission's responsibilities for monitoring and measuring competition between and across various industry segments within the state (cable, broadband, traditional telephony and wireless) highlight the importance of maintaining an active role at the federal level.

Earlier this year the IURC was successful in convincing the FCC to exempt from federal pre-emption, states like Indiana which had already implemented statewide video franchising laws.

Issues such as Universal Service and Video Franchising, for example, are of increasing importance in the communications marketplace as competitors are emerging and crossing into each others' service boundaries. The best example of this came this year when the FCC acted to partially pre-empt states and local governments on the video franchising issue. Indiana filed comments and made a case for a "carve-out" for states that had already acted to reform the franchising process. Indiana was successful and received such a carve-out in the new framework, while other states will now be under the rules and procedures set forth by the FCC.

Rate Transition Period

Additionally, in an attempt to encourage the deployment of broadband availability throughout Indiana, HEA 1279 afforded the opportunity to providers to increase the flat rate for basic service in any local exchange without Commission approval; provided that

they could show those exchanges had met a 50% broadband availability requirement within 18 months after the rate was increased.[14]

This statute provides for an expedited, yet formalized means to process rate increases. It also requires the IURC to further analyze where broadband is being deployed across the State. As of the date of this report, no provider has made use of this provision of the statute.

Video Franchising Authority

The IURC is now the sole franchising authority for the provision of video service in Indiana as of July 1, 2006.[15] Since the first application was filed on August 8, 2006 and through June 30, 2007, the IURC has received and processed 31 Video Franchise applications.

Some of these applications were from providers new to the video industry but many were from existing providers that sought to terminate their local franchises. Some incumbent cable providers chose to maintain their local cable franchises until they expire. Additionally, providers may seek to amend their original applications in order to augment or modify their designated service areas (DSAs).

Providers of Last Resort

The statute also presents a new opportunity for an ILEC to cease serving all or part of its defined service territory by requesting that the IURC relieve it of its obligations as the provider of last resort.[16] The IURC has developed a process for relieving an ILEC of its obligations and choosing a successor provider. However, as of the date of this report no carrier has made such a request.

CTAs

Parity among different types of communications providers by June 30, 2009 is the goal envisioned by the General Assembly. At that time, all providers will be called

[14] I.C.8-1-2.6-1.3(c).
[15] I.C. 8-1-34.
[16] I.C. 8-1-32.4.

Communications Service Providers (CSPs). The statute defines a CSP as, "a person or entity that offers communications service to customers in Indiana, without regard to the technology or medium used by the person or entity to provide the communications service."[17]

Though this part of the statute is not effective until June 2009, the IURC has already modified its procedures in order to create parity across different types of telecommunications providers. The IURC retains the authority to issue CTAs to new communications providers. This authority is a long-term responsibility for the Commission beyond 2009.

The percentage of population with a telephone in Indiana has fallen since the passage of the TA-96.

Data from the FCC indicates that the percentage of population with a telephone in Indiana has fallen since the passage of the TA-96 and Indiana's telephone penetration rate of 91.6% of all households is now lower than the national average of 94.6.[18]

Indiana Lifeline Assistance Program

The Indiana General Assembly recognized the need to specifically address telephone affordability and thus directed the IURC to implement rules for the establishment of a state Lifeline fund.[19] The State program, like the federal low-income program, will allow Indiana Eligible Telecommunications Carriers (ETCs) to receive funding to provide discounts to qualifying low-income households. The IURC has the responsibility to ensure that rules are adopted and in place for the fund no later than July 1, 2008, and that the fund is operational no later than July 1, 2009.

In July 2006, the IURC opened Cause No. 43082 and a formal rulemaking process to address the appropriate funding mechanism and other related issues for the establishment of the Lifeline fund. The IURC is committed to the principle of keeping consumers connected to the network, which increases the value of the network for all Hoosiers and

[17] I.C. 8-1-32.5.
[18] *Telephone Subscribership in the United States*, Wireline Competition Bureau of The Federal Communications Commission, Released June 2007.
[19] I.C. 8-1-36.

enhances Indiana's economy. The IURC will also be engaged in educational outreach efforts to build awareness among eligible consumers of the availability of this program in cooperation with the industry.

Quality of Service

HEA 1279 did not impact the IURC's Service Quality rules.[20] The IURC still has specific procedures in place to deal with carriers that are continuing to provide basic telecommunications service for the benefit of consumers through 2009.

After March 27, 2006 all services other than basic telecommunications service were removed from the jurisdiction of the IURC. Therefore, the service quality rules located at 170 IAC 7-1.2 no longer apply to any service other than stand-alone basic service.[21]

Where competitive wireline service is not available and cell phone service is not reliable, consumers are forced to maintain their existing service even if the service quality is not adequate.

In a truly competitive environment it is assumed that service quality regulations will not be necessary because customers can "vote with their feet", meaning they can switch to another provider if they are unhappy with the quality of service they are receiving from their current provider. Some consumers are doing just that. It is important to note however, that we have not yet reached the point where all areas of the state have competitive choices that are considered by consumers to be true, functional substitutes for wireline telephone service. In areas of Indiana where competitive wireline service is not available, cell phone service is not reliable enough to be considered a substitute, and/or digital (VOIP) telephone service is not available, consumers are forced to maintain their existing service even if the service quality is not adequate.

[20] *See*, 170 IAC 7-1.2-1.

[21] Exceptions to this loss of service quality protections were for companies that continued to be subject to service quality standards included in Settlement Agreements that were reached as a part of Alternative Regulatory Plans. Companies with such Settlement Agreements in place are Verizon, and Embarq. These three companies continued to be subject to the service quality standards included in the settlement agreements until the expiration of their agreements. Embarq has a request pending to terminate their agreement and Verizon's expiration date is under negotiation due to service quality issues.

AREAS OF REGULATION THAT ARE UNCHANGED

Although HEA 1279 brought deregulation to the telecommunications industry in Indiana, the General Assembly specifically recognized that certain areas of regulation and functions should remain intact. These include the fulfillment of obligations under state or federal law (such as TA-96) and enforcement of the terms of effective settlement agreements approved prior to July 29, 2004. Because of these provisions contained in 1279, the Commission remains responsible for managing a significant portion of its previous workload in telecommunications. The following descriptions outline the type of work that the Commission is authorized to continue performing under state and federal law.

Universal Service

Universal Service is a program designed to benefit consumers in all regions of the nation by providing access to comparable services at comparable rates. In order to be eligible to receive funds from the federal or state Universal Service Fund, a company must be certified as an ETC. The IURC has undertaken the designation and certification of ETCs pursuant to TA-96 since 2001.

The information received from the carriers enables the Commission to determine the manner in which support is being utilized and verification that the network is being maintained and upgraded consistent with federal standards. Once the Commission submits a certification to the FCC, the Universal Service Administrative Company (USAC) is notified to disburse funds to those eligible carriers.

Traditionally, ETCs have been wireline incumbent local exchange providers, but the IURC does have the authority to designate wireless and VOIP carriers as ETCs where appropriate.

Traditionally, ETCs have been wireline incumbent local exchange providers, but the IURC does have the authority to designate wireless and VOIP carriers as Competitive ETCs (CETCs) where appropriate. Certain responsibilities come with the ETC designation, such as provider of last resort obligations, providing access to emergency services and offering toll limitation to qualifying low-income customers.

In recent years the Commission has received several petitions from competitive ETCs, including wireless carriers and wireline Competitive Local Exchange Carriers (CLECs). To date the IURC has designated two wireless local exchange providers and three competitive local exchange providers as ETCs.

Slamming and Cramming

In HEA 1279, the General Assembly specifically required the Commission to fulfill its responsibilities to adopt and enforce rules to prevent slamming and cramming. Slamming means that a customer of a telecommunications provider is switched to another telecommunications provider without their consent. Cramming means that a telecommunications provider adds and bills for services not authorized by the customer. The Commission's rules to prevent Slamming and Cramming are actively enforced in three ways:

a) The Commission holds hearings when a complaint petition is filed against a company for slamming and/or cramming, or the Commission may open an investigation if it has reason to believe that slamming or cramming has taken place;

b) The Consumer Affairs Division resolves individual slamming and cramming complaints from consumers. In FY 2006-2007 the Consumer Affairs Division resolved 225 Slamming and 208 Cramming related complaints and returned $34,616.12 to consumers as a result of settling slamming and cramming disputes; and

c) The Commission monitors transfers of customer bases from one service provider to another through a streamlined notification process required of telecommunications carriers for such transactions. The Commission uses this process to ensure that customers are properly notified before they are switched to another carrier under these circumstances.

Regulations to prevent slamming and cramming remain necessary in a competitive market to ensure customers have recourse in the event they are victimized by unethical providers.

Number Conservation / Area Code Relief

Three-digit area codes and seven-digit telephone numbers are finite resources which are in heavy demand. When assignable telephone numbers are exhausted in a particular area code, the IURC must implement area code relief, consisting either of a geographic split of the existing 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 consumers because they involve either changes of phone numbers or use of ten digit dialing to place a local call.

Without policies to encourage number conservation and an agency to monitor the assignment of blocks of numbers, some telecommunications carriers have little incentive to conserve telephone numbers. Although administration of the North American Numbering Plan is overseen primarily by the FCC, states have monthly and daily monitoring responsibilities such as ensuring that carriers seeking numbers have a CTA and reporting to the North American Numbering Plan Administrator (NANPA) on carriers that are delayed in utilizing the numbering resources they have been allocated.

Due to number conservation efforts, exhaust projections for all Indiana area codes have been moved back.

When the time inevitably comes that an area code is near exhaust, the IURC is petitioned by the NANPA to determine the appropriate form of area code relief. Fortunately, due to industry cooperation and number conservation efforts, pressure to relieve the state's codes has eased, and exhaust projections for all area codes have been moved back slightly from last year.

Area code 812 is projected to be the nearest to exhaust. A petition for area code relief could be filed by NANPA before the end of 2007. The 765 area code is also projected to exhaust within five years. The Commission is in the process of determining if mandatory number pooling[22] in both 812 and 765 will delay exhaust further, and may soon be

[22] Number Pooling is a method of conserving telephone numbers in which numbers are returned by all carriers to a central authority, which puts them in a pool, from which other carriers receive numbers in blocks of 1,000. Allocating numbers in smaller blocks enable states to delay area code relief.

petitioning the FCC for delegated authority to take such action. The current status of numbering resources for Indiana's six area codes is reflected in the following table:

Table 5

Area Code Life Projections

Area Code	Year & Quarter of Projected Number Exhaust
219	2025 4Q
260	2025 4Q
317	2013 1Q
574	2026 3Q
765	2012 4Q
812	2010 2Q

Public Safety

Under HEA 1279, the Commission continues to be responsible for duties concerning the administration of the 211 dialing code.[23] The Commission is also charged with fulfilling its duties under any state or federal law concerning the administration of any universally applicable dialing code for any communications service[24], which would include 811 services and 911 services. The IURC's role is to ensure that telecommunications carriers offering service in the state do their part in implementing these systems.

Rapid changes in the provisioning of telecommunications services have greatly increased the challenges to the 911 community.

911 is the National Dialing code for Emergency Services

E911 is a critical public safety issue for all Hoosiers. Enhanced 911 or E911 differs from standard 911 in that it not only provides contact with emergency services, but provides emergency personnel with the location of the caller. The ongoing provision of this emergency service to the citizens of Indiana is of great concern to consumers

[23] I.C. 8-1-2.6-13(d)(3).
[24] I.C. 8-1-2.6-13(d)(14).

throughout the state. All counties in Indiana, with the exception of Martin County[25], have county-wide wireline E911 service.

The Commission's involvement in this area consists of monitoring and assisting in the deployment of E911 services in Indiana. The IURC retains the authority to deal with 911-related matters, including interconnection and any other types of dispute resolution.

Rapid changes in the provisioning of telecommunications services have greatly increased the challenges of ensuring that the caller's location information is identified properly. Additionally, sufficient funding for the Public Safety Answering Points (PSAPs) has become an important issue in recent years. The IURC is committed to remaining involved with this aspect of the 911 issue.

811 is the National Dialing Code for Pipeline Safety

In March 2005, the FCC designated "811" as the national toll-free abbreviated dialing code to be used by state "One Call" notification systems.[26] As noted in the Natural Gas Report, these systems are designed to provide advance notice of excavation activities to underground facility operators, in compliance with the Pipeline Safety Improvement Act of 2002. By providing advance notice of excavation plans to utilities with underground facilities, the utility is provided ample time to properly identify and mark the location of their facilities prior to excavation activity. This pre-planning reduces pipeline ruptures, telecommunication cable breaks, disruption of electric power, etc. Authority was delegated to the states pursuant to section 251(e) of the TA-96 to address all technical and operational issues associated with the implementation of the 811 dialing code.

On August 23, 2006, the Commission designated Indiana Underground Plant Protection Services (IUPPS), located in Greenwood, Indiana, as the administrator and sole proprietor of the 811 dialing code. In April 2007, the 811 dialing code became fully operational in Indiana.

[25] Martin County has wireless 911, but not wireline 911. Wireline 911 is anticipated to be operational within one year according to Verizon's 911 Service Manager.

[26] *In the Matter of The Use of N11 Codes and other Abbreviated Dialing Arrangements*, CC Docket No. 92-105 (Released March 14, 2005).

The 211 dialing code for referrals to social service agencies is continuing to expand in Indiana.

The 211 Dialing Code is for Referrals to Social Service Agencies

The purpose of the 211 dialing code is to create a statewide, seamless network of information and referral services accessible by residents of the state that will provide rapid referrals to human services organizations. The Indiana 211 Partnership, Inc. was formed in 2000 as an Indiana nonprofit corporation whose stated purpose is to plan for, implement, and oversee a telephone based information and referral system in Indiana through use of the 211 dialing code. As of April 2007, 211 service is available to 65 counties covering over 5.3 million Indiana residents.[27]

In June, 2004, the IURC issued an Order recognizing the 211 Partnership as the authorized administrator and user of the 211 code in the state of Indiana. In preparation for anticipated federal and/or state funding, the Indiana General Assembly passed HEA 1344 (P.L.60), which became effective July 1, 2004. HEA 1344 created an account within state government to be administered by the IURC. However, the account is currently dormant and all 211 funding to date has been private.

Carrier to Carrier Disputes

The IURC retains its authority to resolve disputes between carriers under HEA 1279.[28] Under Section 251 of the Telecommunication Act, all telecommunications carriers are required to interconnect directly (or indirectly) with the facilities and equipment of other telecommunications carriers. Additionally, Section 251 also requires Incumbent Local Exchange Carriers to provide unbundled access to their networks at rates, terms and conditions that are nondiscriminatory; and to offer resale of their services at wholesale rates.

Disputes arise when competing telecommunications carriers are unable to agree on the terms of interconnection, reciprocal compensation or intercarrier compensation. When this occurs, telecommunications carriers may petition the IURC for arbitration, or file a complaint petition against the other carrier. Four (4) noteworthy arbitrations were

[27] Ibid.
[28] I.C. 8-1-2.6-1.5(b).

completed in September 2006, in which Sprint Communications sought to interconnect with four small rural carriers. These consolidated arbitrations were the first of their kind in Indiana, because Sprint sought interconnection with these carriers not to provide service directly to end users, but instead to provide wholesale interconnection and telephone service to a cable provider. The Commission required the small rural carriers to interconnect with Sprint, which fostered facilities-based intermodal competition in these rural areas.

Payphones[29]

The IURC retains jurisdiction to establish just and reasonable rates that may be charged by an ILEC to a payphone service provider. Rates must be based on costs incurred by the ILEC to provide the service, consistent with requirements of 47 U.S.C. §276, which are nondiscriminatory and consistent with guidelines for payphone service providers established by the FCC. The Division is actively monitoring payphone issues across the State because of the public safety implications associated with their availability.

RULES AND POLICIES ELIMINATED PURSUANT TO HEA 1279

HEA 1279 requires the IURC to:

> "identify and eliminate rules and policies concerning telecommunications service and telecommunications service providers if the rules or policies are no longer necessary in the public interest or for the protection of consumers as the result of meaningful economic competition between providers of telecommunications services."[30]

Under HEA 1279 the IURC is mandated to review and report, in each odd-numbered year beginning with 2007, which rules and policies have been eliminated, and provide an explanation of why they are no longer in the public interest.[31] The Commission began this review immediately upon passage of HEA 1279.

[29] I.C. 8-1-2.6-16.
[30] I.C. 8-1-2.6-4.1.
[31] As required in I.C. 8-1-2.6-4(c)(3).

Policies

The IURC began streamlining its telecommunications policies even before the passage of HEA1279, and with passage has continued along that path. Starting in 1999, the Telecommunications Division began creating expedited processes due to emergence of competition in the market. These processes for certifications and changes reduced the regulatory burden on these types of companies and reduced the workload at the Commission as well.

The Commission has further expanded the use of expedited processes for all providers of telecommunications services. The streamlined procedures available to wireless providers and toll resellers were reworked and made available for providers of facilities based and resold local service. The IURC also rescinded one order and dismissed two cases immediately following the passage of HEA 1279.

Rules

At this time no rules have been eliminated pursuant to HEA 1279. This is due to continued IURC jurisdiction over basic telecommunication service (BTS) and the fact that existing rules still apply as long as BTS remains under IURC's jurisdiction. It is also due to the continuation, under the statute, of ARP plans and settlement agreements that were already in place at the time of passage. In addition, HEA 1279 provided for the continuation of some of the Commission's rules (e.g. 170 IAC 7-1.1-19 regarding slamming and cramming and 170 IAC 7-6 and 170 IAC 7-7 dealing with interconnection issues.

The Rules dealing with service quality, customer rights and responsibilities, telephone Uniform System of Accounts and small local exchange carriers need to remain in place until July 1, 2009 when IURC jurisdiction over basic telecom service ends.[32] 170 IAC 7-4-8, which deals with procedures for establishing extended area service, is being allowed to "sunset" pursuant to Ind. Code § 4-22-2.5-2. It will expire on January 1, 2008.

[32] 170 IAC 7-1.2, 170 IAC 7-1.3, 170 IAC 7-2.1, and 170 IAC 7-5.

VI. EFFECTS OF TECHNOLOGICAL CHANGE AND COMPETITION ON UNIVERSAL SERVICE AND PRICING IN THE TELECOMMUNICATIONS MARKET

COMPETITION

Thus far, competition in communications services has had a minimal effect on universal service in Indiana. Universal service, as discussed in this section of the report, is the percentage of households who subscribe to at least basic local telephone service. There is little evidence that competition has increased or decreased the number of people subscribing to telephone service that provides access to the Public Switched Telephone Network (PSTN). Indeed, most residential customers are provided service by a carrier that has an ongoing obligation to provide basic local service as a provider of last resort.

The Commission will continue to monitor the availability of basic local service and rates charged by carriers, as well as the subscription rates for basic local service.

TECHNOLOGICAL CHANGE AND PRICING

As discussed earlier in this report, technological changes are increasing the availability of advanced communications services, such as high-speed broadband and video services. While the trend is to offer bundles and packages which provide higher per customer revenue, the effect of these pricing strategies on subscribership rates is also unknown. The Commission continues to monitor the subscription rates in an effort to understand what effect, if any, competition has on universal service.

In Indiana, competition in the enterprise or large business customer market is robust. Due to the high volume of services purchased and the large per-customer revenues, the market is attractive for facilities-based providers. Competitors are able to offer a variety of packages and service bundles that are often deeply discounted.

Because of the vast changes in technology, infrastructure development and deployment can also be affected. As communications providers attempt to keep pace with technological developments, capital improvement projects become more of a focus because of the costs and expenses involved. Most often, the benefits of new infrastructure enable carriers to offer additional advanced services to customers while providing an opportunity for cost recovery.

VII. FEDERAL TELECOMMUNICATIONS POLICY IMPLICATIONS FOR THE STATE OF INDIANA

Few policy debates have attracted as much attention in recent years as the debate regarding Universal Service.

On the national level, the telecommunications landscape has also changed. The effects of this change can be seen through recent FCC and congressional actions. As policies are evolving to reflect this changing landscape, the practical effects of these changes are most often felt by the states. More specifically, state jurisdictional issues have been called into question over the last year in two key policy arenas: Universal Service and Video Franchising. Finding the appropriate balance between policies which facilitate market entry, those which encourage innovation, and those which recognize the legitimate concerns of the states has been a challenge both for the FCC and for all states, including Indiana.

Few policy debates have attracted as much attention in recent years as the debate regarding Universal Service. State and federal regulators, members of Congress and industry personnel are considering what actions are necessary to solve the growing problems associated with the Federal Universal Service Fund. The issue of "who gets what" has captured the attention of state commissions and more recently, the FCC, because of recent Federal State Joint Board actions.[33]

Equally central to the national debate has been Video Franchising. The FCC took action on this issue this past year by issuing a pre-emptive decision aimed at streamlining the cable franchising process for new entrants and centralizing jurisdictional authority at the federal level. The FCC sought comments[34] on how to implement Section 621(a) (1)

[33] The Federal State Joint Board on Universal Service was formed in February 1996 when President Clinton signed into law the Telecommunications Act of 1996. This Act expanded the scope of the existing Universal Service provisions. The Federal State Joint Board on Universal Service was established in March 1996, to make recommendations to implement the universal service provisions of the Act. The Joint Board is comprised of FCC Commissioners, State Commissioners and a Consumer Advocate representative. The Board makes economic and social policy recommendations to the FCC regarding Universal Service and related matters. Most recently, the Joint Board issued a recommended decision designed to address the exponential growth of the federal high cost fund by temporarily capping federal support for certain carriers driving this growth while the Board examines and determines a long-term, competitively neutral and viable solution for all eligible carriers.

[34] MB Docket No. 05-311- Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992.

of the Communications Act of 1934, as amended (the Act) in addition to market access for multi-channel video programming distributors (MVPD) at the state and local levels. The Notice of Proposed Rulemaking (NRPM) in this docket specifically sought input related to the impact of local and state-wide franchising efforts, similar to HEA 1279.

Changes in Federal Universal Service Policy & Funding

In a recent Recommended Decision, the Joint Board proposed a change in policy aimed at controlling the explosive growth in high-cost universal service support[35] disbursements. Specifically, the Joint Board recommended 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. The cap is based on the average level of competitive ETC support distributed in that state in 2006.[36] 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.[37] The Board also committed to making further recommendations regarding comprehensive high-cost universal service reform within six months of this Recommended Decision.

Specifically, the Board is reviewing proposals related to the use of reverse auctions as a means of determining high-cost support, the use of geographic information systems (GIS) technology and network cost modeling to better calculate and target support at a

[35] 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 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.

[36] 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.

[37] *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*).

more tightly-defined geographic user-based level, the disaggregation of high-cost support for rural areas, and support for broadband services.[38]

The Federal Universal Service fund is at risk of becoming unsustainable.

High-cost support has been rapidly increasing in recent years and, without immediate action to restrain growth, the Federal Universal Service Fund is in jeopardy of becoming unsustainable.[39] Today, the Universal Service Fund provides approximately $4 billion per year in high-cost support.[40] As recently as 2001, high-cost support totaled just $2.6 billion.[41] Indiana received approximately $56 million in high-cost support in 2006, approximately $5.5 million of which went 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. This goal is consistent with that of HEA 1279, to develop appropriate polices that enhance the competitive and economic landscape for Indiana consumers and businesses alike.

Indiana will remain at the forefront of the issues while preserving our State's competitive interests.

Indiana has a strong voice on these issues at the federal level because we hold two seats on the Joint Board, a Commissioner, Larry S. Landis and the State Staff Chairperson, Jennifer Richardson. This allows Indiana to remain at the forefront of the debate, while preserving our own state's competitive interests.

Evolution of the Video Services Market

Over the last year, the FCC examined the Video Franchise issue in MB Docket 05-311 where it suggested that a single national policy was necessary to address a competitively stifled video services market. The IURC took action to protect its newly

[38] *Id.*
[39] The most recent contribution factor is 11.7%, which is the highest level since its inception. *See Proposed Second Quarter 2007 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, 20 FCC Rcd 5074 (2007).
[40] *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*).
[41] *Id.*

enacted state law and filed a letter with the FCC requesting a carve-out for states that had already addressed the issue.

Indiana was the first state in the Midwest to enact groundbreaking video legislation.

In March of 2006, Indiana became the first state in the Midwest to enact groundbreaking legislation that opened the video service markets for all multi-channel video programming distributors (MVPDs). While HEA 1279 provided that the IURC become the sole video franchising authority for the State of Indiana, it also enabled all providers, including telephone companies, the opportunity to avoid lengthy and protracted negotiations with individual, local jurisdictions.

The IURC argued before the FCC that several states had taken the initiative to streamline video franchising processes through legislative and/or regulatory action in an effort to address the concerns articulated by the FCC in this proceeding Further, the IURC noted that while we agreed there were likely to be some areas that resisted opening their markets to competition, we believed that the continuing groundswell of *state* action best addressed these and other concerns outlined in the NPRM.[42] Simply put, the IURC reiterated that states were in the best position to deal with their markets, rather than having a single, monolithic policy that could increase the risk of unanticipated or dysfunctional results.

Earlier this year, the FCC did in fact issue a decision to preempt local and state action on the video franchise issue and largely replace it with a streamlined federal policy. The IURC is pleased to report that concurrent with our recommendations, the FCC did provide a specific exemption for Indiana, and other like-minded states which had already adopted state-level video franchise reform.[43]

[42] Notice of Proposed Rulemaking released November 18, 2005.
[43] *See*, FCC 06-180A1 Report and Order and Further Notice of Proposed Rulemaking, rel. March 5, 2007.

VIII. Appendices

Appendix 1

FCC Registered Video Service Providers Active in Indiana by County Including Average Price for Basic Service

Note: Average price is the average of the prices for basic video service of all providers in a given county. For our purposes, the definition of basic video service is the smallest available package from a given provider. The number of channels provided in a basic package varies widely. Some providers only offer one sized package for all customers.

Adams
Insight Communications Midwest LLC
Mediacom Indiana LLC
Avg. Price (AP) $16.47

Allen
Comcast
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $12.66

Bartholomew
Charter Communications
Comcast
SUSCOM (acquired by Comcast 6/06)
AP $32.79

Benton
Insight Communications Midwest LLC
Longview Cable and Data LLC
AP $13.55

Blackford
Comcast
Insight Communications Midwest LLC
AP $12.37

Boone
Bright House Networks, LLC
Longview Cable and Data LLC
Insight Communications Midwest LLC
Rapid Communications LLC
AP $14.12

Brown
Insight Communications Midwest LLC
Interlink Communications Partners LLC
AP $14.07

Carroll
Comcast
AP $15.06

Cass
Comcast
Longview Cable and Data LLC
Insight Communications Midwest LLC
AP $11.40

Clark
Insight Communications Midwest LLC
AP $12.00

Clay
Cequel III Communications II LLC (Now Suddenlink)
Interlink Communications Partners LLC
AP $24.50

Clinton
Comcast
Longview Cable and Data LLC
Insight Communications Midwest LLC
Mulberry Cooperative Telephone Company, Inc.
Tri-County Communications Corp
AP $14.09

Crawford
Charter Communications
AP $14.85

Daviess
Cequel III Communications II LLC (Now Suddenlink)
Charter Communications
Interlink Communications Partners, LLC
AP $15.75

De Kalb
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $ 20.95

Dearborn
SUSCOM (acquired by Comcast 6/06)
Sunman Cablevision Company
Time Warner Entertainment Company LP
AP $16.16

Decatur
Comcast
Insight Communications Midwest LLC
Longview Cable and Data LLC
Sunman Telecommunications Corporation
AP $11.59

Delaware
Comcast
Insight Communications Midwest LLC
Longview Cable and Data LLC
AP $13.51

Dubois
Charter Communications
Longview Cable and Data LLC
Insight Communications Midwest LLC
Perry-Spencer Communications, Inc.
AP $13.11

Elkhart
Comcast
Mediacom Indiana LLC
New Paris Telephone's Quality Cablevision Inc
AP $18.81

Fayette
Comcast
AP $30.27

Floyd
Insight Communications Midwest, LLC
AP $12.00

Fountain
Comcast
Longview Cable And Data LLC
Insight Communications Midwest, LLC
AP $12.52

Franklin
Comcast
AP $16.74

Fulton
Comcast
Longview Cable and Data LLC
RTC Communications Corporation
TV Cable of Winamac Inc
AP $15.44

Gibson
Cequel III Communications II LLC (Now Suddenlink)
Charter Communications
Insight Communications Midwest LLC
AP $12.10

Grant
Bright House Networks, LLC
Insight Communications Midwest LLC
Longview Cable And Data LLC
Oak Hill Cablevision Inc
The Swayzee Telephone Co Inc
AP $18.89

Greene
Cequel III Communications II LLC (Now Suddenlink)
Longview Cable and Data LLC
Insight Communications Midwest LLC
AP $11.59

Hamilton
Bright House Networks, LLC
Comcast
Longview Cable and Data LLC
Insight Communications Midwest LLC
AP $23.13

Hancock
Bright House Networks, LLC
Indiana Fones, Inc.
Insight Communications Midwest LLC
AP $17.51

Harrison
Century Cablevision Holdings, LLC, Debtor-In-Possession (Now Time Warner)
Insight Communications Midwest, LLC
AP $23.65

Hendricks
Bright House Networks, LLC
Charter Communications
Comcast
Longview Cable and Data LLC
AP $13.56

Henry
Indiana Fones, Inc.
Insight Communications Midwest LLC
AP $13.55

Howard
Insight Communications Midwest LLC
AP $13.55

Huntington
Citizens Telephone Corp
Comcast
Longview Cable and Data LLC
AP $14.90

Jackson
Comcast
Longview Cable and Data LLC
Insight Communications Midwest LLC
AP $16.56

Jasper
Comcast
Mediacom Indiana LLC
TV Cable of Rensselaer Inc
AP $29.15

Jay
Insight Communications Midwest LLC
AP $12.77

Jefferson
Fop Indiana LP (Now Time Warner)
AP $12.15

Jennings
Comcast
AP $11.59

Johnson
Charter Communications
Insight Communications Midwest LLC
AP $15.28

Knox
Cequel III Communications II LLC (Now Suddenlink)
Interlink Communications Partners, LLC
AP $17.20

Kosciusko
Comcast
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $18.34

La Porte
Comcast
Mediacom Indiana LLC
AP $29.64

Lagrange
Comcast
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $18.44

Lake
Comcast
Mediacom Indiana LLC
Wideopen West Illinois LLC
AP $19.92

Lawrence
Insight Communications Midwest LLC
Interlink Communications Partners LLC
AP $11.28

Madison
Bright House Networks, LLC
Insight Communications Midwest LLC
Longview Cable and Data LLC
AP $12.06

Marion
Bright House Networks, LLC
Comcast
AP $29.49

Marshall
Comcast
Mediacom Indiana LLC
Twfanch-One Company
AP $16.61

Martin
Cequel III Communications II LLC (Now Suddenlink)
Charter Communications
Longview Cable and Data LLC
AP $18.65

Miami
Comcast
Insight Communications Midwest LLC
Longview Cable and Data LLC
Oak Hill Cablevision Inc
AP $ 15.99

Monroe
Insight Communications Midwest LLC
AP $11.59

Montgomery
Comcast
Longview Cable and Data LLC
Tri-County Communications Corp
AP $25.42

Morgan
Charter Communications
Comcast
Insight Communications Midwest LLC
AP $22.28

Newton
Mediacom Indiana LLC
TV Cable of Rensselaer Inc
AP $32.00

Noble
Comcast
Longview Cable and Data LLC
Ligtel Communications, Inc.
Mediacom Indiana LLC
AP $ 28.14

Ohio
SUSCOM (acquired by Comcast 6/06)
AP $12.59

Orange
Charter Communications
Interlink Communications Partners LLC
AP $12.85

Owen
Insight Communications Midwest LLC
AP $11.59

Parke
Cequel III Communications II LLC (Now Suddenlink)
Longview Cable and Data LLC
Rapid Communications LLC
AP $38.00

Perry
Charter Communications
Comcast
Perry-Spencer Communications, Inc.
AP $13.11

Pike
Charter Communications
Longview Cable and Data LLC
AP $13.20

Porter
Comcast
Mediacom Indiana LLC
AP $16.40

Posey
Insight Communications Midwest LLC
Telecommunications Management, LLC
Sigecom LLC
AP $31.40

Pulaski
Mediacom Indiana LLC
TV Cable of Winamac Inc
AP $46.52

Putnam
Cequel III Communications II LLC (Now Suddenlink)
Cinergy Metronet, Inc
Clay County Rural Telephone Cooperative, Inc.
Longview Cable and Data LLC
Glass Antenna Systems Inc
Insight Communications Midwest LLC
AP $ 20.16

Randolph
Comcast
Insight Communications Midwest LLC
Time Warner Entertainment Company LP
AP $13.42

Ripley
Comcast
SUSCOM (acquired by Comcast 6/06)
Enhanced Telecommunications Corporation
AP $28.56

Rush
Comcast
Insight Communications Midwest LLC
AP $11.70

Scott
Insight
AP $11.59

Shelby
Insight Communications Midwest LLC
SUSCOM (acquired by Comcast 6/06)
AP $37.91

Spencer
Charter Communications
Perry-Spencer Communications, Inc.
UCA, L.L.C., Debtor-In-Possession (Now Time Warner)
AP $21.63

St Joseph
Comcast
Mediacom Indiana LLC
Twfanch-One Company
AP $17.02

Starke
Mediacom Indiana LLC
AP $35.45

Steuben
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $20.95

Sullivan
Cequel III Communications II LLC (Now Suddenlink)
Insight Communications Midwest LLC
AP $11.59

Switzerland
Fop Indiana LP (Now Time Warner)
AP $16.22

Tippecanoe
Comcast
Longview Cable and Data LLC
Insight Communications Midwest LLC
Rapid Communications LLC
Tri-County Communications Corp
AP $28.12

Tipton
Insight Communications Midwest LLC
AP $13.55

Union
Comcast
Time Warner Entertainment Company LP
AP $19.49

Vanderburgh
Insight Communications Midwest LLC
Sigecom LLC
Telecommunications Management, LLC
Twfanch-One Company
AP $26.25

Vermillion
Longview Cable and Data LLC
Insight Communications Midwest LLC
Rapid Communications LLC
AP $24.75

Vigo
Cequel III Communications II LLC (Now Suddenlink)
Interlink Communications Partners LLC
Rapid Communications LLC
Time Warner Entertainment Company LP
AP $19.63

Wabash
Comcast
Galaxy American Communications Inc (Longview)
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $16.82

Warren
Insight Communications Midwest LLC
Longview Cable and Data LLC
AP $13.55

Warrick
Cequel III Communications II LLC (Now Suddenlink)
Charter Communications
Insight Communications Midwest LLC
Sigecom LLC
Warrick Indiana LP (Now Time Warner)
AP $24.98

Washington
Insight Communications Midwest LLC
Tele-Media Solutions
AP $11.86

Wayne
Insight Communications Midwest LLC
Twfanch-Two Co
AP $13.54

Wells
Comcast
Mediacom Indiana LLC
Warren Cable
AP $16.49

White
Comcast
AP $12.10

Whitley
Longview Cable and Data LLC
Mediacom Indiana LLC
AP $20.95

Appendix 2

Infrastructure Deployment by Rural ILECs and Municipalities

Rural Incumbent Local Exchange Carriers

New Paris Telephone Co.

New Paris Telephone (NPT) began providing 512k broadband service using DSL technologies in 1996. Today, the telephone operations sector provides all speeds of broadband, via twisted pair plant, using several xDSL service platforms to obtain speeds up to 11 Megs. Broadband service is available to 100% of their subscribers. NPT offers broadband bundles as well as 'naked' DSL, which is the ability to purchase DSL from a company without purchasing basic voice service. New Paris Telephone also owns Quality Cablevision (QC) as a subsidiary corporation. QC is a locally franchised cable TV provider. Currently, QC has four local franchises in the company's service area. In addition, QC offers broadband service via their hybrid fiber coaxial network, with speeds from 128k to 6 Megs. Service is available to 100% of the company's video subscribers. Data only service is available and has been since 2004.

Craigville Telephone Co.

Craigville Telephone Company, Inc., in Wells County will provide IPTV over copper and fiber beginning in the fall of 2007. IPTV, Craigville Telephone's new digital television product, has thrust the company into the position of a true “triple play” provider in selected areas of rural Wells County and Bluffton Indiana. Voice, video, and data will be available from Craigville through its own fiber optic infrastructure at a very competitive price. IPTV will be available to all Fiber-to-the-Home customers in Bluffton through Craigville’s affiliated CLEC, Adams Wells, and will also be available to nearly 50% of Craigville Telephone customers served over copper lines within the company’s ILEC service territory.

Rochester Telephone Co.

RTC d/b/a Rochester Telephone Company, Inc. has been the provider of telephone service in Rochester, Indiana since 1896. The company first offered CATV and CLEC service to its customers in the neighboring town of Akron, Indiana over a Fiber-to-the-Curb technology in 2000. This allowed RTC to offer cable television, telephone services and internet service to all of its customers. The ability to be a “one stop shop” allowed RTC to have a huge advantage over the incumbent telephone and cable companies in Akron. RTC has about 800 telephone lines and 350 CATV subscribers in the Akron area. In 2003, RTC began offering Fiber-to-the-Home in Rochester. This allowed RTC to offer high-speed internet and CATV in addition to its telephone service. The high-speed internet product has upload and download speeds of 6M. In 2007, RTC began to offer a Digital upgrade to its CATV customers allowing many more channels, High Definition TV, an Electronic Program Guide and the ability to have a DVR. RTC provides its CATV service to nearly 1,800 customers in Rochester and is in the process of expanding their video service area to include all of their rural telephone customers.

Washington County Rural Telephone Co-op, d/b/a Tele-Media Solutions

Tele-Media Solutions of Pekin IN which provides service to members in Clark, Floyd, Scott and Washington Counties started migrating customers from its existing video over ATM facilities to an IPTV solution in September 2006. Tele-Media Solutions has offered bundled or unbundled video, data and voice services, including internet access, with home bandwidth of 24.7 megabits, since 2003.

Perry-Spencer Rural Telephone Co-op, d/b/a PSC

PSC is a local telephone cooperative that provides telephone, cable TV and internet services to rural communities throughout Perry, Spencer, Dubois, Pike, Warrick and Crawford Counties. In 2007 PSC will extend their fiber optic network into the neighboring communities of Ferdinand, Huntingburg, Jasper, Tell City and Troy. In fact PSC will be providing a complete broadband package to the city of Ferdinand; voice, internet and cable TV.

Hancock Telecom

Hancock Telecom has been offering the Triple Play since late 2005. The offering includes digital television, 1.5 Meg of Broadband, Voice and Long Distance. Hancock Telecom offers Broadband packages with speeds up to 1.5 Meg. and has the ability to offer more bandwidth to customers as they need it. Hancock Telecom is also deploying Wireless Broadband technology via unlicensed spectrum. This enables the company to serve remote areas inside & outside its service territory. These customers may receive speeds up to 1 Meg. Hancock Telecom was one of the first companies in the state of Indiana to deploy Fiber-To-The-Home (FTTH) technology. Currently the company is in the second year of a seven year plan to overbuild its copper plant with FTTH technology. When the project is complete the majority of Hancock's territory will be served by FTTH. Hancock Telecom is also a hub to seven independent communication companies for video services distributed via the Indiana Fiber Network.

Ligonier Telephone

Ligonier Telephone Company in Noble County through its subsidiary, LigTel Communications Inc., launched its own television service in June of 2006. Ligonier Telephone Co. states that it is able to respond quickly to changes in the marketplace because of its small size. Ligonier has 2,600 telephone access lines. To date, about 150 customers have signed up for the service.

Municipalities

Accelplus

The City of Crawfordsville, through Crawfordsville Electric Light & Power (CEL&P) has established a separate telecommunication division, known as Accelplus. Through Accelplus, the city can provide the basic infrastructure and systems required to supply advanced data and video services. This will ensure that citizens and businesses have the benefits and economic opportunities of these advanced services today.

Lebanon, Indiana

The City of Lebanon is one of the few communities in the US that provides high-speed internet through existing power lines. This service is called iLines. As iLines' customer base grows, they plan to expand their BPL coverage area to include all of Lebanon.

South Bend, Indiana

The city of South Bend is in a very enviable position with regard to technological opportunity. The city has the St. Joe Valley Metronet, a state-of-the-art telecommunications dark fiber infrastructure consisting of a 40-mile network of fiber-optic cable initially running throughout its territory. The Metronet is creating a high-speed data network with virtually unlimited bandwidth. When connected to it, businesses, schools, health care facilities and other entities are able to transmit data faster and easier than ever before while enjoying greater operational flexibility, cost savings and security. Metronet connects to a vast array of transcontinental fiber already running through St. Joseph County for powerful high-speed access to the rest of the country.


Water/Wastewater Report

2007 WATER/WASTEWATER REPORT

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I. WATER/WASTEWATER OVERVIEW

Industry Structure

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 65% of regulated water utilities serve fewer than 3,300 customers. Chart 2 shows that only 6% of water customers, served by regulated water utilities, are served by utilities with fewer than 3,300 customers.

Chart 1

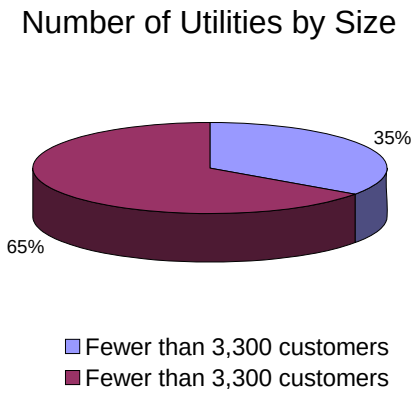
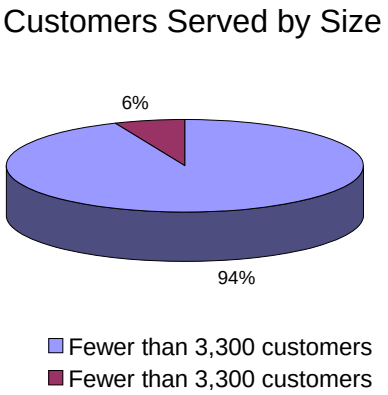


Chart 2



Source: IURC Annual Reports

The water sector is the most capital intensive of all utilities, investing more capital per dollar of revenue earned than any other industry.[1] This industry is also characterized by low variable costs, typically defined as purchased power and chemicals.

[1] For example, Aqua Indiana had a total assets/revenue ratio of 5.4 while AT&T had 4.3, and NiSource had 2.4. Source: Presentation to Western NARUC Utility Rate School 2007, Janice Beecher.

Industry Organizations

There are several Indiana water industry organizations with various levels of participation. The Indiana Section of the American Water Works Association (AWWA) is the largest and most visible. In addition to the AWWA, other organizations include the National Association of Water Companies, the Indiana Rural Water Association, the Alliance of Indiana Rural Water, the Indiana Association of Sewer Companies, Indiana Regional Sewer District Association and the Indiana Water Environment Association. Because the industry does not have a single, unified state level organization to represent itself, communication between stakeholders and industry is cumbersome.

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 the utility is subject to the Indiana Utility Regulatory Commission's jurisdiction and the extent of the Commission's regulation.

The legal form of a utility determines whether the utility is subject to the Indiana Utility Regulatory Commission's (Commission or IURC) jurisdiction and the extent of the Commission's regulation. The rates, terms, and conditions of service 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. Not-for-profit water and sewer utility rates, terms, and conditions of service are regulated by the Commission unless they have opted-out. The Commission does not regulate municipal sewers, nor does it regulate regional water/sewer districts[2].

[2] Regional water/sewer districts are utilities established by the Indiana Department of Environmental Management. In 2005, the General Assembly passed a law 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. See I.C. 13-26-11-2.1.

Certificates of Territorial Authority

A Certificate of Territorial Authority (CTA) is Commission authorization to provide utility service in a defined area. Investor-owned and not-for profit sewer utilities are required to obtain CTAs from the Commission even if the utility has opted out of the Commission's jurisdiction. Municipal sewer utilities, regional sewer districts and conservancy districts providing sewer service are not required to obtain CTAs. Water utilities do not have CTAs and have no service territory regulation except to the extent the Commission has jurisdiction over territorial disputes between water utilities.

Thus, the Commission has only partial oversight of 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 regulated 125 water utilities out of 835 and 55 wastewater utilities out of 541. Chart 3 shows the 10 largest regulated water utilities.

Chart 3

10 Largest Regulated Water Utilities Ranked by Number of Residential Customers		
1	Indianapolis Water Company	263,107
2	Indiana American Water Co.	246,974
3	Fort Wayne Municipal Water	63,533
4	Evansville Municipal Water Works	57,589
5	South Bend Municipal Water	36,002
6	Carmel Municipal Water	24,019
7	Lafayette Municipal Water Works	22,842
8	Anderson Municipal Water Works	21,409
9	Utility Center, Inc.	18,472
10	Bloomington Municipal Water	16,886

The total assets and revenues of the Commission regulated water systems are $3.1 billion and $449 million respectively. The total assets and revenues for the Commission regulated wastewater utilities are $143.5 million and $24.5 million respectively.

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 and/or the Indiana Department of Natural Resources (DNR). IDEM is the state agency responsible for enforcing drinking water and wastewater effluent regulations promulgated by the U.S. Environmental Protection Agency (EPA). DNR is the state agency that provides stewardship over water from lakes, rivers and streams, and aquifers and is charged with developing the state's water shortage plan. 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.

The water and wastewater industries are unique from the electric, gas and telecommunications industries in that they are not subject to federal economic regulation. 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. Economic regulation of water and sewer industries has been left to the individual states. Traditionally, the lower impact on a consumer's budget compared to other utility services may have resulted in a perceived need for less economic and managerial regulation.

II. CHANGES IN THE INDUSTRY

Acquisition and Consolidation

The pace of acquisition and consolidation has slowed significantly.

In the early 1990's, the water industry began a period of acquisition and consolidation led by Indiana-American, the state's largest investor-owned water utility. Indiana-American acquired most of the state's largest investor-owned utilities, including Indiana Cities, United Water's Indiana properties and Northwest Indiana Water. In addition to these acquisitions, Indiana-American also acquired several smaller utilities. The City of Indianapolis acquired the Indianapolis Water Company five years ago, and last year, the Town of Winfield acquired the investor-owned sewer utility providing service inside its corporate boundaries. For several years, the City of Fort Wayne has been seeking to acquire a portion of an investor-owned water and sewer utility that provides service in and around its corporate boundaries. The Indiana Supreme

Court issued a recent decision[3] in the City of Fort Wayne's effort to condemn and acquire a portion of an investor-owned utility under eminent domain that will allow the City to proceed. It is not clear whether this decision will influence other municipalities to follow this course of action, but any eminent domain proceeding will likely be a costly and time-consuming event.

Emergency Response

A 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 method for utilities that have sustained damage from natural or man-made events to obtain emergency assistance in the form of personnel, equipment, materials and other services as necessary from other water/wastewater utilities. California pioneered the concept with its California Water/Wastewater Agency Response Network (CalWARN) 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, predominantly AWWA, and the program officially came into existence on August 29th, 2007, the second anniversary of Katrina. The network is called InWARN and it is anticipated that the Indiana Association of Cities and Towns will create and maintain a website for the network. The Commission supports the InWARN program and anticipates that utilities under its jurisdiction will participate.

Rising Costs

Costs are increasing for water and wastewater utilities which may have an effect on customer rates. The utilities are facing the need for significant capital investment. Driving those needs include:

- Replacement of aging infrastructure;
- Compliance with EPA standards such as water quality;
- Growing customer demand; and
- Relocation of facilities for city and state road projects and stormwater projects.

[3] Utility Center, Inc. d/b/a AquaSource versus City of Fort Wayne No. 02S04-0706-CV-248.

System Development Charges

As utilities search for new ways to finance infrastructure investments and minimize the effect on existing customers, a number of utilities have filed petitions with the Commission to establish system development charges or SDCs. An SDC is assessed to property owners who connect their premises to the utility's system for the first time. SDCs are designed primarily to recover a utility's cost to provide new customers with source of supply, treatment and storage facilities. The use of SDCs support the notion that growth should pay for growth, and reduces the likelihood that existing customers will pay for new facilities constructed to serve growth.

In addition to SDCs, other creative ways need to be identified to reduce the rate effect on customers as utilities continue to make significant investments in infrastructure. Infrastructure procurement is one area where the largest utilities are able to achieve cost savings. Small and medium-sized local utilities, on their own, enjoy little opportunity to consolidate or develop economies which can produce cost savings. In an effort to replicate the cost savings which can be achieved by larger utilities, the hundreds of small water and wastewater systems need the ability to consolidate purchasing power. Such arrangements are called purchasing cooperatives. Examples of infrastructure purchases that could be included as part of a purchasing cooperative include meters, hydrants, pipe, pumps, motors, booster stations, chemicals, and even water storage tanks.

Water Supply Issues

While frequently a topic in the arid Southwest, water supply issues have seldom been of concern to the relatively water-rich Midwest. The water supply in Indiana has generally been plentiful. Over the past few years, however, water rights or water access issues have arisen in several instances. The most recent example involved the City of Indianapolis' Department of Waterworks and AquaVisions, LLC which began to work on a "project to address Drought Tolerance and Alternate Water Supply." The project involved construction of a proposed pipeline from Lake Monroe to Indianapolis, and was met with resistance from various groups. In addition to this event, others have occurred including the recent dispute between the City of Greensburg and the Decatur County Rural Water Company which include elements of water supply issues.

On August 22, 2007, the City of Greensburg and Decatur County Rural Water (DCRW) filed a Joint Petition with the Commission to resolve a territorial dispute between the water utilities by approving an agreement executed by the parties establishing service area boundaries. The agreement also provides an increased long-term supply of water for DCRW. This case is currently pending before the Commission.

As recently as August 21, 2007, the National Oceanic and Atmospheric Administration U.S. Drought Monitor identified that 74% of Indiana was classified as "abnormally dry" with 62% experiencing "moderate drought" and 41% experiencing "severe drought."

Indiana has not always been able to economically access the amount of water needed. Even areas that typically have plenty of water go through periods of drought. As recently as August 21, 2007, the National Oceanic and Atmospheric Administration (NOAA) U.S. Drought Monitor identified that 74% of Indiana was classified as "abnormally dry" with 62% experiencing "moderate drought" and 41% experiencing "severe drought." This issue is further exacerbated 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 restricts Lake Michigan water to a small portion of the state.

A new concern affecting the state's water supply is the operation of ethanol plants, which is discussed in the Natural Gas section of this Report. The ethanol production process requires large amounts of water. Experts indicate that an ethanol plant requires 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 contribute to the need to identify which category of water users should receive water and in what amounts in the event of a water shortage.

One role of the Commission is to ensure adequate and reliable utility service. Thus, the Commission has a direct interest in water supply assurance and responsible use of water. The DNR has been assigned the task of developing the state's water shortage plan. Commission staff members attend and participate in the development of this plan. The Commission's ability to promote wise use and water system efficiency include distribution system improvements, leak

detection and remediation programs, demand management and integrated water resources planning, conservation, rate design alternatives, and communication and education, all of which can help to bolster water supply[4].

Rate Design

The most common rate structures used by Hoosier water utilities are declining block and uniform rate with a monthly minimum or monthly service charge. Under a declining block rate structure, the price per unit of water decreases as consumption increases. Under a uniform rate structure, the unit price for water remains the same no matter how much water is consumed. When price per unit decreases or stays the same as usage increases, users do not receive the proper price signals and therefore have limited incentive to conserve water.

One of the biggest obstacles to alternative rate design is development and implementation costs. When most utilities seek rate increases, the increase is applied "across-the-board" or as an equal percent increase to all customer classes. When an alternative rate design is proposed, a more expensive cost of service study must be completed. Rate design changes also require consumer education and acceptance. The Commission works with the Office of Utility Consumer Counselor (OUCC), utilities and other stakeholders to determine the best method to implement more effective rate designs.

The General Assembly passed House Bill 1738 during the Spring 2007 legislative session. The bill requires the Water Resources Committee to study and make recommendations concerning current processes and methods for water resource allocation and distribution planning in Indiana, and to report those findings and recommendations to the Legislative Council not later than November 1, 2007. With respect to water supply issues, the Commission's primary focus is conservation and rate design. The Commission will review the study along with its findings in order to apply them to regulated utilities.

[4] The National Regulatory Research Institute report titled, "Water Supply Assurance and Drought Mitigation Options for State Regulatory Commissions and Key Stakeholders" dated November 2002.

Leak Detection and Remediation

Leak detection programs can allow utilities to reduce water and revenue losses and make better use of water resources. The Commission includes provisions in its orders that require utilities to identify and correct situations that cause lost water. Some of the provisions include completion of water audits and leak detection surveys, meter replacement programs and calibration of large meters.

III. EFFECTIVENESS OF REGULATION

Main Extension Policy

The Commission's main extension rules have not been updated since 1990. Under the current rules, utilities share the cost of main extensions with developers by providing a 3-year revenue allowance[5]. Because utility costs are passed on to ratepayers, this practice causes 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 for a variety of reasons.

Second, many utilities now employ SDCs as a method to support the notion that growth should pay for growth. The current rule conflicts with this notion. Where a utility has implemented an SDC and remains in compliance with the current main extension rules, it will pay the developer the 3-year revenue allowance amount. Then, it receives payment from the developer for its SDC. Elimination of the 3-year revenue allowance would allow utilities' to reduce the administrative burden and costs associated with administering the rule.

Further, the revenue allowance has the unintended effect of providing a competitive advantage to utilities subject to the Commission's main extension rules. If all else remains equal, a developer will favor a utility that offers the 3-year revenue allowance over one that does

[5] The 3-year revenue allowance is included in the IURC's main extension rules. The revenue allowance is calculated as 3 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.

not. The Commission has recently begun to study the main extension issue which may ultimately lead to a rulemaking.

Outside-City Customers

Many municipal utilities provide service to customers outside their corporate boundaries. This is beneficial for the utility because customer growth can contribute to economies of scale and rate stability. This can also constrain the proliferation of small developer-owned systems that sometimes become troubled. However, many municipalities impose a surcharge or higher rates on outside-city customers. Premiums can range from 5% to 50% greater than inside-city customers pay for the same service. In some cases, the motivation for imposing the surcharge or higher rates is to stimulate support for annexation; in other cases, the motivation may be simple revenue enhancement. A corporate boundary is usually not the same as a natural boundary (such as a river or mountain) which may impose additional costs to serve those customers, whether residential or commercial. As a result, it is often difficult to support the difference between in-city and outside-city water rates.

A still greater problem occurs for outside-city customers of municipal water utilities that have opted out of the Commission's jurisdiction. One justification for allowing municipals to opt-out of the Commission's jurisdiction is that all customers in the municipality have a voice in how the utility is operated when voting for local leaders. However, customers located outside a municipal's corporate boundaries cannot participate in the local municipal elections and therefore, have no voice in utility matters.

Sub-Metering/Sub-Billing

Sub-metering and sub-billing is a practice usually engaged in by multi-unit housing complexes or mobile home parks, which bill tenants or residents 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, bad check fees and others. While sub-metering encourages customers to conserve water, since it is no longer provided "free", the practice creates several concerns for the Commission.

Complaints expressed by consumers who contact the Commission and OUCC include excessive fees, high rates, unrealistic usage, disconnection and eviction. A December 2000 Journal of the AWWA article titled "Rapid Growth in Sub-metering Produces Benefits and Problems" indicated:

> "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."

Most of these issues are addressed in the Commission's rules when the customer is directly served by the utility, but not in cases of sub-metering.

The Commission receives a steady flow of complaints from individuals who have been sent bills with varied and sometimes unreasonable charges, as well as those who have had their service disconnected and face additional charges to be re-connected.

In an effort to manage this issue, the Commission has developed an informal policy whereby the Commission will not assert its regulation if certain practices[6] are adhered to. In April 2007, the Commission initiated a broad investigation into the practice of sub-metering and sub-billing of water and sewer service. The Commission plans to use this ongoing investigation to gain a better understanding of the practices and parties involved.

[6] The practices generally provide that an owner/landlord must not resell water utility service at a profit and must pass on to tenants only its actual per unit cost of service as charged by the utility. The owner/landlord must not collect from tenants more than the owner/landlord pays to the water utility service provider. Additionally, an owner/landlord should not bill tenants for water utility service costs associated with common areas (e.g. swimming pools, fountains, landscaping), meter reading, bill processing or bill collection. This information is typically provided to an owner/landlord in a letter from the OUCC or Commission after a complaint has been received.

Troubled Water/Wastewater Utilities

Troubled utilities serve a small number of customers but may consume a great deal of state agency time and effort.

There is a group of water and wastewater utilities that the Commission loosely classifies as "troubled systems." The Commission works in conjunction with the OUCC and IDEM to identify these utilities and collaborate on solutions. These utilities are typically small, developer-owned utilities which in some cases are turned over to residents of the development once they have met the developer's objectives of facilitating the sale of residential real estate. Over time, many of these utilities deteriorate and create customer service and/or environmental problems. While these systems typically serve only 30 to 300 customers, they can consume a great deal of state agency time and effort.

In most cases, a new owner needs to be found to take over a rather unattractive property. In addition to significant capital investment to correct deficiencies, new owners may face an Enforcement Action from IDEM to correct deficiencies. Customer relations may be difficult because of past customer service issues and the need for a significant rate increase. When new owners do step in, they sometimes believe that the state should provide money to pay the cost of capital improvements. If a new owner cannot be found, a new entity such as a regional sewer district may be established to take over the assets and operate the utility.

In 1999, the General Assembly provided the Commission with a tool to address these utilities with the passage of I.C. 8-1-30, known as the "receivership" statute. This law provides the Commission with the ability to issue an order to appoint a receiver and direct the sale of the utility assets at fair market value, if the Commission finds the utility has severe deficiencies it failed to remedy. The receivership process can be very lengthy and during this time, significant costs can be incurred by the receiver. These costs are ultimately paid by the utility customers. Moreover, it is difficult to manage ongoing cases, supervise the receiver and monitor the costs incurred. Further, the legal issues related to the receivership can complicate the process of identifying a new owner. Despite its disadvantages, receivership is a useful tool available to the Commission.

Stronger rules and requirements to establish a new utility and use of existing utilities are two methods that may by used to reduce the proliferation of small, developer-owned and developer-initiated systems.

IV. COMPETITION

Competition in the water and wastewater industries is practically non-existent with respect to price and quality of service. The bottled water industry is typically listed as a competitor to the water utility industry, but customers only drink a small percentage of the water provided by water utilities.

Competition for service territory and new customers is accelerating in Indiana. Customer growth allows a utility to generate economies of scale and provides rate stability. Competition is more prevalent in the water industry where CTAs do not exist. However, in the sewer industry competition for service territory is evident when a utility petitions the Commission to expand its service area.

Service Area Disputes

Competition for new territory and customers sometimes leads to service area disputes. Service area disputes arise out of one utility's actions to prevent competition from another utility. Examples include:

- Extension of water mains to areas where it is at best marginally feasible, in an effort to discourage another utility from providing service;
- More than one utility installs infrastructure in the same area to serve customers;
- One utility providing 100% of a neighboring system's water supply to limit the supply provided, or in extreme cases, to completely shut off the water. When water supply is limited, a provider hopes to gain a competitive advantage to be the sole supplier to future customers.

The Commission on its own does not establish a specific service territory for each water utility because it lacks authority to do so. This is in contrast to the other utility industries. For

example, in the electric industry, every electric utility, even those which have "opted-out" of economic regulation by the Commission, have a specific Commission-assigned service territory.

Water utilities essentially establish their service territories on a "first-come, first-serve" basis without Commission involvement. When a dispute arises between water utilities over service territory, the Commission does have authority to settle the dispute. However, the Commission's limited involvement does not provide the state and the water industry with the same orderly development of water utility service as provided by service territory regulation used for electric utilities.

V. INFRASTRUCTURE INVESTMENT

Regulatory Incentives to Invest

The Indiana Advisory Commission on Intergovernmental Relations report titled, "Financial Needs for Wastewater and Water Infrastructure in Indiana," (January 2003) estimates that statewide wastewater and drinking water infrastructure needs for the period 2000 to 2020 are at least $12.4 to $13.9 billion. The needs include: correction of combined sewer overflows, wastewater conveyance and treatment, remediation of failing septic systems, stormwater conveyance and management, and drinking water production, treatment and distribution facilities.

Several Indiana utilities are addressing infrastructure needs as reflected by their capital plans submitted in recent cases. Indianapolis Water Company submitted a capital plan to spend more than $230 million over four years while the City of Fort Wayne's water utility submitted a capital plan to spend more than $100 million over six years. Indiana-American recently filed a Petition seeking pre-approval of additional source of water supply and treatment facilities. When all phases are complete, these two projects are estimated to cost more than $55 million.

The General Assembly passed the Distribution System Improvement Charge as an incentive to replace aging infrastructure.

Utilities regulated by the Commission have incentives to encourage infrastructure investment. The most recent such incentive passed by the legislature in 2000[7], created the Distribution System Improvement Charge or DSIC. The DSIC is a mechanism that allows a water utility to increase its rates and recover the costs of improvements to its distribution system without a rate case. Indiana was the second state in the nation to approve this type of mechanism. Four investor-owned water utilities are taking advantage of this mechanism. Wastewater utilities, which would also benefit from a DSIC, cannot avail themselves of this law.[8]

Investor-owned utilities may also benefit from the Commission's treatment of interest and depreciation expense after a project is complete. Under normal accounting rules, utilities deduct interest expense associated with capital improvements and depreciate the improvements when they are placed in service. Interest and depreciation expense deductions from income have an adverse impact on a utility's net income before a project has been included in a utility's rate base. When requested by a utility and approved by the Commission, a utility is allowed to defer the capital costs and depreciation expense on the utility's balance sheet until its 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. Municipal and not-for-profit utilities have been allowed to present a 5-year capital improvement plan in rate cases and the average amount is included as a component of revenue requirements called Extensions and Replacements. This practice allows utilities to include future infrastructure projects in rates, without relying entirely on debt.

Given the large capital outlay required for infrastructure investment, utility credit ratings are important; credit ratings determine a utility's cost of borrowing funds. These significant costs are ultimately passed on to ratepayers. To the extent that higher credit ratings result in lower interest rates, ratepayers benefit. The Commission's practices and the laws in place have

[7] I.C. 8-1-31.
[8] Several wastewater utilities have contacted the Commission regarding DSIC.

provided adequate returns and coverage ratios to generate favorable credit ratings in most instances.

Large water/wastewater utilities have management that develops master planning studies. However, many smaller systems do not have the expertise to complete such studies. A master planning study develops a capital improvement plan for the utility to implement so that it can continue to provide its customers with quality and reliable service. Without a capital 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 be in reaction to crisis or new growth. Such an approach will compromise customer service and ultimately produce higher costs to customers. The Commission plans to use its authority to encourage jurisdictional utilities to complete these studies.

Economic Development

Infrastructure investment and water availability are important contributors to economic development. Extending utility infrastructure to new business may prove costly if a utility is required to invest significant funds to serve a prospective business, and the business is not willing to reimburse the utility. The cost of water and wastewater infrastructure can run to millions of dollars which most utilities do not have and would not want its existing ratepayers to pay. The lack of water and/or wastewater service in some areas of the state can hinder economic development. Finally, reliability and quality are critical factors in certain manufacturing applications.

VI. APPENDICES

APPENDIX A – RESIDENTIAL WATER BILL COMPARISON

RESIDENTIAL WATER BILL COMPARISION AVERAGE MONTHLY BILL AT 5,000 GALLONS OR 668 CUBIC FEET		
(List includes only IURC regulated utilities.)		
Rank	**Utility Name**	**2006**
1	Sullivan-Vigo	$67.20
2	Morgan County Rural, Western Exp.	$51.94
3	American Suburban	$51.78
4	German Township, Marrs Division	$50.46
5	Brown County, Southern Division	$49.46
6	South Lawrence	$46.45
7	North Lawrence	$45.80
8	Brown County, Northern Division	$45.15
9	Marion Heights	$43.79
10	Morgan County Rural	$42.20
11	Indianapolis, IWC Morgan	$39.75
12	German Township Stewartsville	$38.71
13	Indiana-American: Burns Harbor, Chesterton, Gary, Merrillville, Porter, South Haven*	$38.35
14	Fillmore	$38.10
15	St. Anthony	$37.95
16	Valparaiso Lakes*	$37.69
17	Indiana-American: Hobart*	$37.64
18	Indiana-American: Portage*	$37.60
19	Jackson County	$36.37
20	South Harrison	$36.23
21	Pioneer	$35.00
22	East Lawrence Water	$34.90
23	Clinton Township	$33.16
24	Southwestern Bartholomew	$32.73
25	Gibson Water	$32.08
26	Washington Twp. Of Monroe	$31.86

27	Posey Township	$31.55
28	Utilities, Inc.	$31.03
29	Indiana-American: Kokomo*	$30.92
30	Perry	$30.60
31	Indiana-American: Noblesville*	$30.33
32	Cataract Lake Water Corporation	$30.30
33	Pipe Creek	$30.00
34	Edwardsville Water	$28.38
35	Pike-Gibson	$28.33
36	North Dearborn	$28.33
37	Bluffs Basin	$28.15
38	Reelsville	$28.05
39	Indiana-American: Seymour, Somerset, Summitville	$27.97
40	Painted Hills	$27.75
41	Indianapolis, Harbour*	$27.57
42	Fayette Township	$27.40
43	Pleasant View	$27.25
44	Indiana-American: Richmond, Wabash Valley*	$27.04
45	Marion	$27.02
46	Indiana American: Johnson County - Greenwood, So. Indiana (Jeffersonville, New Albany), Newburgh*	$26.91
47	Boonville*	$26.89
48	Fortville, outside	$26.82
49	Hillsdale Water	$26.65
50	Indiana American: Crawfordsville*	$26.50
51	Chandler, Town*	$26.43
52	Indiana-American: Mooresville	$26.06
53	Waldron	$25.98
54	Mishawaka, Clay	$25.50
55	Consumers Indiana, Lake County Indiana	$25.44
56	Indianapolis, Darlington	$25.35
57	Pence	$25.00
58	Eaton	$25.00
59	B&B Water Project	$24.84

60	Indiana-American: Muncie, Johnson Co. – Franklin, Shelbyville, Clarksville, Summitville	$24.55
61	Stucker Fork, Austin	$24.45
62	Grantsburg	$24.44
63	Indiana-American: Wabash*	$24.30
64	St. Henry	$24.20
65	Valley Rural	$24.16
66	Bargersville, with in ground sprinklers	$24.13
67	Everton	$23.98
68	Southern Monroe	$23.98
69	Cordry Sweetwater - mostly outside of jurisdiction	$23.93
70	Indiana American: Winchester	$23.48
71	Van Bibber Lake	$23.40
72	Wedgewood Park	$23.26
73	Floyds Knobs	$23.15
74	Ramsey	$23.10
75	Salem	$22.99
76	Indiana-American: Warsaw*	$22.64
77	River's Edge	$22.55
78	Flowing Wells*	$22.47
79	Princeton	$22.45
80	Prince's Lakes	$22.40
81	Auburn*	$22.31
82	Van Buren Water	$22.25
83	Water Service Co. of IN	$22.24
84	Mapleturn	$22.15
85	German Township	$22.10
86	Shady Side Drive	$21.96
87	Eastern Bartholomew	$21.67
88	Eastern Heights	$21.59
89	Schererville*	$21.16
90	Martinsville, Morgan-Monroe Forest*	$21.12
91	Apple Valley	$21.02
92	Michigan City*	$20.92
93	Sugar Creek	$20.70

94	Oak Park	$20.67
95	Silver Creek	$20.60
96	Knightstown*	$20.47
97	Ellettsville, outside town*	$20.27
98	Dyer	$20.26
99	Ogden Dunes	$20.03
100	Columbia City	$19.89
101	Tri-Township	$19.85
102	Fort Wayne, outside City	$19.83
103	Kingsford Heights	$19.55
104	LMS Townships	$18.94
105	Riverside	$18.87
106	Marysville-Otisco-Nabb	$18.65
107	Peru, inside Corporate limits*	$18.57
108	Watson Rural	$18.55
109	Aurora, outside city	$18.50
110	Bargersville	$18.36
111	Charlestown	$18.30
112	J.B. Waterworks	$18.26
113	Fortville, inside	$17.90
114	Twin Lakes	$17.90
115	Utility Center	$17.82
116	Indiana-American: West Lafayette	$17.57
117	Kingsbury	$17.55
118	Troy, Ridge Road	$17.48
119	South 43	$17.40
120	Fort Wayne, inside City	$17.26
121	Corydon*	$16.90
122	Fairview Park	$16.70
123	Indianapolis, IWC service area**	$16.24
124	Peru, outside Corporate limits	$16.20
125	Carmel & acquisitions	$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	Rhorer, Harrell & Schacht	$15.10
134	Troy, Non-Ridge Road	$15.08
135	Anderson Municipal	$13.71
136	Highland	$13.49
137	South Bend*	$13.34
138	Petersburg	$13.25
139	Sellersburg	$13.25
140	Battleground	$13.13
141	Evansville, Outside City*	$12.52
142	Martinsville*	$12.06
143	Evansville, Inside City*	$11.28
144	Lafayette	$10.80
145	Columbus*	$10.69
146	East Chicago	$10.32
147	Hoosierland Vistas (formerly Burns Harbor)	$10.00
148	Madison	$9.95
149	Lawrenceburg	$9.51
150	Schneider	$9.15
151	Elkhart	$9.00
152	Country Acres	$6.00
153	Hessen Utilities	$6.00
154	Redkey	$5.90
155	Hammond	$2.20
* Fire Protection surcharge for a 5/8" Meter is included		
** Fire Protection surcharge for 5/8" Meter is included in the base charge		
This Bill Analysis should be construed as an informative guideline as a snapshot in time. Do not use this analysis to draw conclusions about performance since many factors such as size, resources, and customer density, etc. effect the bill calculations.		

APPENDIX B – RESIDENTIAL WASTEWATER BILL COMPARSION

RESIDENTIAL WASTEWATER BILL COMPARISION AVERAGE MONTHLY BILL AT 5,000 GALLONS OR 668 CUBIC FEET		
(List includes only IURC regulated utilities.)		
Rank	**Utility Name**	**2006**
1	Sani Tech, Inc.	$70.00
2	JLB Development, Inc.	$65.53
3	Centurian Corporation	$65.00
4	South Haven Sewer Works, Inc.	$64.95
5	West Boggs Sewer District, Inc. (metered)	$60.20
6	Sugar Creek Utility Company, Inc.	$60.14
7	Chimneywood Sewage Works, Inc.	$60.00
8	Wymberly Sanitary Works, Inc.	$60.00
9	Lakeland Lagoon Corp.	$59.52
10	Indiana American Water Company-Muncie & Somerset	$55.77
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	Water Service Company of Indiana, Inc.	$44.28
20	LMH Utilities Corporation	$42.28
21	Devon Woods Utilities, Inc.	$41.88
22	Mapleturn Utilities, Inc.	$41.31
23	Old State Utility Corporation	$40.79
24	Twin Lakes Utilities, Inc.	$40.27
25	Eastern Richland Sewer Corporation	$40.11
26	Doe Creek Sewer Utility	$39.50
27	Eastern Hendricks County Utility, Inc.	$39.00
28	Valley Rural Utility Company	$38.98
29	Northern Richland Sewage Corporation	$38.30
30	Hamilton Southeastern Utilities, Inc. (Flatfork Creek)	$36.00
31	Green Acres Sanitation Co., Inc.	$34.15
32	Hamilton Southeastern Utilities, Inc.	$33.55
33	Utility Center, Inc. (unmetered)	$31.22

34	Hillview Estates Subdivision Utilities, Inc.	$30.00
35	Suburban Utilities, Inc.	$29.29
36	East Shore Corporation	$29.17
37	Brushy Hollow Utilities, Inc	$27.10
38	Wildwood Shores	$27.00
39	Southern Enterprises Environment	$25.07
40	Wastewater One, LLC (formerly Highlander Village Sewage)	$25.00
41	Utility Center, Inc. (metered)	$24.77
42	Rivers Edge Utility, Inc	$22.55
43	Pleasantview Utilities, Inc.	$21.61
44	Hardin Monroe, Inc.	$21.00
45	Cha Utilities	$20.50
46	Kingsbury Utility Corporation	$19.56
47	Thralls Station	$18.25
48	Harbortown Sanitary Sewage Corporation	$18.00
49	Driftwood Utilities, Inc.	$15.38
50	Hoosierland Vistas	$14.00
51	Country Acres Property Owners Association	$6.00
52	Hessen Utilities, Inc.	$4.00
This Bill Analysis should be construed as an informative guideline as a snapshot in time. Do not use this analysis to draw conclusions about performance since many factors such as size, resources, and customer density, etc. effect the bill calculations.		


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

SUFG – 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


Glossary

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 or 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.