
HOOSIERENERGY
65TH
ANNIVERSARY / 2014

65 YEARS OF COOPERATIVE PARTNERSHIP

An Illustrated History of Hoosier Energy Rural Electric Cooperative

HOOSIERENERGY

65TH

ANNIVERSARY / **2014**

HOOSIERENERGY
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FOREWORD

The 65th anniversary of Hoosier Energy is a significant milestone that inspires reflection upon our past, present and future. Our generation and transmission cooperative is pleased to present the story of six and half decades of power supply partnership through the pages of this special publication.

Hoosier Energy's history is marked by challenge, struggle and overcoming adversity. Battles were won because our cooperative leaders were intensely committed, persevered and refused to lose. When we published "50 Years of Cooperative Partnership" in 1999, we set out to chronicle their efforts in bringing rural electrification to central and southern Indiana. Because of their determination, the people of central and southern Indiana and southeastern Illinois today enjoy reliable, affordable, consumer-owned power.

The story bears repeating, and is reprinted in its entirety in chapters 2-11 of "65 Years of Cooperative Partnership." Since we published "50 Years of Cooperative Partnership," a cavalcade of changes has swept through the industry - changes in power markets, advances in technology and political forces that wish to reshape the industry.

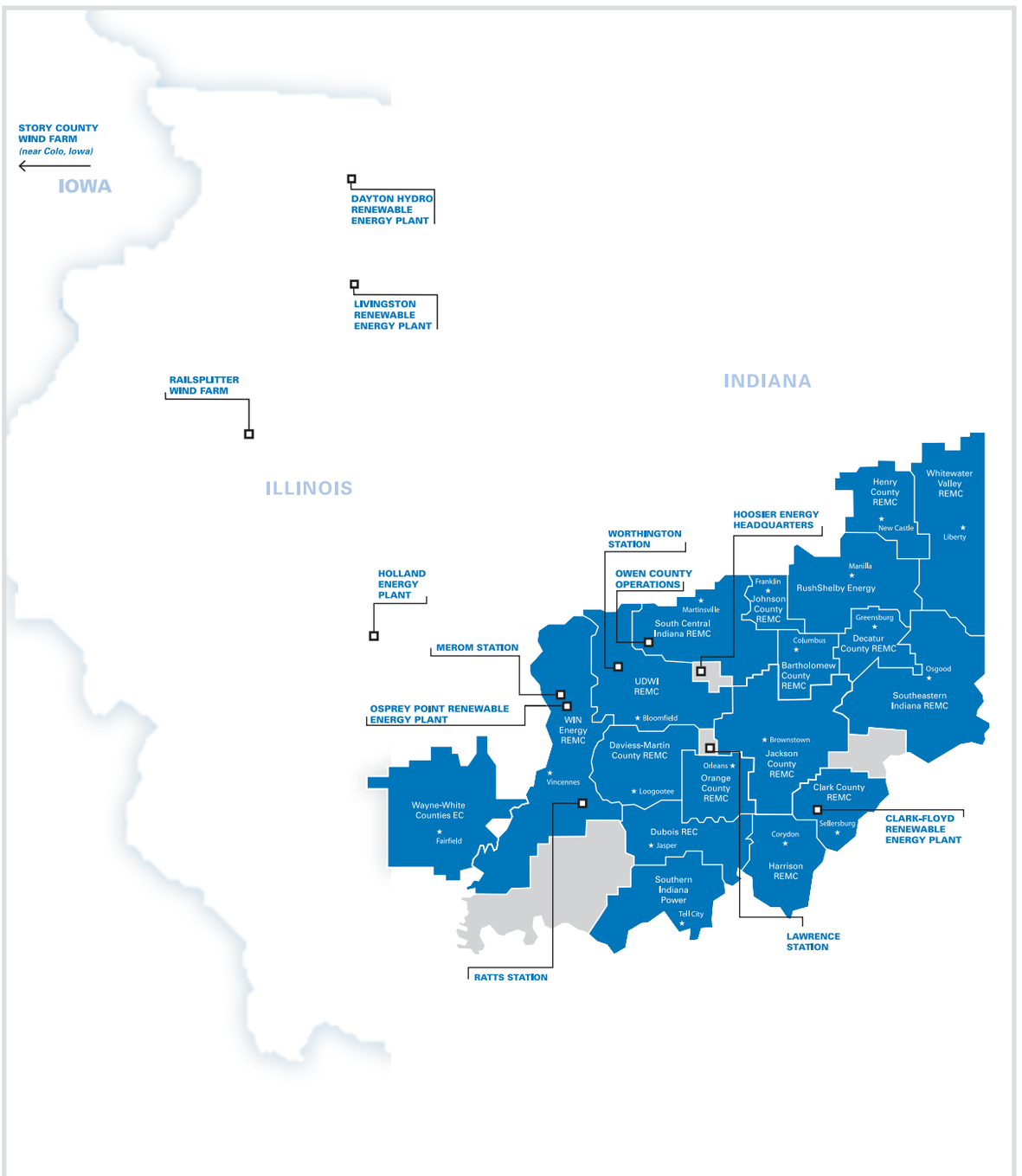
"65 Years of Cooperative Partnership" reprints the first book and then moves forward detailing Hoosier Energy's legacy of success in meeting the challenges of the 21st century while continuing to provide member distribution cooperatives with an affordable and reliable power supply.

Our success over the last 65 years comes from the cooperation and dedication of the people who make up Hoosier Energy — the board of directors, distribution cooperative leadership and our employees. They have made lasting and significant contributions to Hoosier Energy's power supply legacy.

Like Hoosier Energy's founders, today's cooperative leaders are working to further our business, address industry change and build even greater value through the power of cooperative partnership.

Steve Smith
President and Chief Executive Officer
Hoosier Energy Rural Electric Cooperative

HOOSIER ENERGY POWER NETWORK



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CHAPTER ONE

HOOSIER ENERGY TODAY

Hoosier Energy is a very different generation and transmission cooperative from the power supply organization that a handful of southern Indiana electric cooperative leaders envisioned in the spring of 1949. At that time, the original members collectively served about one percent of today's load, and distribution co-op general managers and directors were primarily concerned with the high wholesale power rates they were paying to the state's investor-owned utilities.

Eight days after meeting at Wilhelm's Cafe in Rushville to formally incorporate what would become Hoosier Energy, the Board of Directors unanimously passed a resolution to seek a $6.5 million loan from the Rural Electric Administration (REA) to build a generation and transmission system.

From the 1960s into the 1980s, Hoosier Energy would overcome huge challenges to build the Ratts and Merom generating stations and a high-voltage transmission system across central and southern Indiana to serve member cooperatives. The power supply cooperative would come into its own as a major player in Indiana's electric utility infrastructure during the 1980s and 1990s, and it would confront and overcome deregulation, environmental

The 1,070-megawatt Merom Generating Station in Sullivan County, Indiana provides dependable, clean baseload power at a competitive cost for Hoosier Energy's 18 member distribution cooperatives.

and financial challenges in the 21st century.

By 2014, the founding vision has become a 65-year reality, and more importantly a cooperative success story of which the incorporators would be proud. Hoosier Energy has matured and grown into an operating generation and transmission cooperative that serves 18 member electric cooperatives with nearly 300,000 member consumers in a 15,000 square mile area in southern Indiana and southeastern Illinois. The power supplier operates eight power plants, including the 1,070-megawatt Merom Generating Station in Sullivan County, Indiana, and the 250-megawatt Ratts Generating Station in Pike County, Indiana.

Hoosier Energy and its founding members persevered through much opposition to build Indiana's first electric cooperative power plant - the 250-megawatt Ratts Generating Station near Petersburg in Pike County.

Hoosier Energy's generation resources include 50 percent ownership of the 630-megawatt Holland Energy combined-cycle plant in east-central Illinois that uses natural gas as its fuel source as well as two natural gas peaking plants: the 174-megawatt Worthington Generating Station and 66 percent of the 258-megawatt Lawrence County Generating Station, both located in Indiana.

Hoosier Energy has made significant strides in recent years to increase renewable energy resources in its generation portfolio, including two landfill methane generating stations, a coalbed methane facility and hydropower and wind energy purchase power agreements. The commitment to renewable energy has been strengthened with plans for utility-scale solar projects and a voluntary board policy to increase the renewable portion of the portfolio to 10 percent by 2025.

High-voltage electric power is delivered to member cooperatives over a network of 1,724 miles of transmission lines, 24 primary transmission and switching substations, and more than 350 delivery points.

Hoosier Energy is a thriving cooperative business with nearly 500 employees and annual operating revenues of more than $700 million. The utility exists to serve its

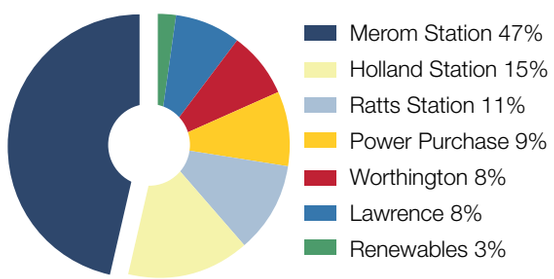
members with a commitment to the economic health and vitality of southern Indiana and southeastern Illinois and now ranks among the 100 largest cooperatives in the United States in annual sales.

The success of the cooperative's coordinated economic development and demand side management (DSM) programs is an example of the strong partnership between members and Hoosier Energy. Partnering with local communities as well as members, the economic development program regularly earns a national ranking in the top 10 among U.S. utilities. It's known for a collective and collaborative approach to not only creating but also retaining jobs through initiatives with member systems such as a key accounts program. Member systems and the G&T have a respected position in the state economic development community.

The cooperative's mission states that it will "provide member distribution systems with assured, reliable and competitively priced energy and services in a safe and environmentally acceptable manner." Hoosier Energy delivers on that promise. While the area experienced some of the most severe winter weather in 30 years in January and February 2014, Hoosier Energy continued to deliver reliable and affordable electricity to its member systems.

With its strong financial position, diversified generation portfolio and dedicated workforce, Hoosier Energy can offer members competitive wholesale electric power rates combined with an unmatched menu of member services. A high level of member satisfaction reflects that commitment to members.

2014 capacity – 2,100 MW



In 2013, members unanimously extended their wholesale power contracts with Hoosier Energy to 2050. The contracts included a member-driven evergreen provision that means each contract periodically renews unless a member provides advance notice of cancellation. Updated contracts will take Hoosier Energy past its 100th anniversary and are evidence of the sustainability of the G&T's cooperative business model.

Providing reliable, affordable electricity to members requires Hoosier Energy to continue investing in infrastructure and facilities that improve efficiencies including facilities that improve productivity. At the end of 2014, a new headquarters facility was completed in Bloomington joining an Operations Center that opened earlier in the year in Owen County. The nearly $50 million investment in the two facilities is part of a long-range plan adopted by the cooperative's Board of Directors to improve business and operations functions.

The "Commitment Stands Tall" statue at Hoosier Energy's new headquarters pays tribute to those who built the electric system in rural southern Indiana and Illinois.

Hoosier Energy closed its 65th year with the same vision, clarity of purpose and perseverance that has served the organization so well since 1949. Energy policies have come and gone. Economics have changed. But one thing remains constant: the cooperative principles are as true today as they were 65 years ago. Working together with members, Hoosier Energy will meet the challenges ahead, remaining focused on creating value for members and advancing the business, now and for years to come.

CHAPTER TWO

"I'LL DO ANYTHING IN THIS WORLD TO GET ELECTRICITY"

Donald A. Davis, one of the founders and incorporators of Hoosier Energy Rural Electric Cooperative, recalled his earliest impressions of electric power. Davis, born on a Franklin County farm in 1909, remembered as a youth visiting the nearby communities of Brookville and Connersville and being impressed by the electric lights burning in parlors and kitchens.

Davis remembered thinking that "I'll do anything in this world to get electricity. At the time, I got interested in rural electrification, and that's been my life," he said in a videotaped interview made shortly before his death in 1989.

Davis' pledge to get electricity for his farm was common in rural Indiana in the 1920s and 1930s. But the drive and determination that Davis showed to get electricity for himself and his neighbors was distinctly uncommon. The electric lighting revolution that transformed America beginning in the early part of the 20th century all but bypassed farms and rural areas. By the 1920s, investor-owned utilities had brought electric power to most of America's cities and towns. But farmers, unless

they were located on the outskirts of a small town that had a central station electric light plant, were by and large without electricity as late as the 1930s.

Thomas Alva Edison's creation of an incandescent lighting system in 1879 transformed society, but electric power was primarily an urban phenomenon through its first 50 years of existence.

Major Indiana cities — Indianapolis, Fort Wayne and Evansville—had electric arc streetlights as early as the 1880s. Smaller communities like Bloomington, Jasper and Lawrenceburg were electrified around the turn of the century. In the early decades of the 20th century, interurban electric street railways criss-crossed the Hoosier state. A farmer in rural Jackson County could travel to Seymour and ride the interurban to Indianapolis or Louisville, yet that same farmer was unlikely to have electric power on the farm.

But Indiana farmers were luckier than most. Because of the density of small towns, particularly in the southern half of the state, utilities did run lines to rural customers including farms on a limited basis. And many farmers in southern Indiana during the 1920s rigged generators to old tractors to pump water for livestock and lift silage into barns. As early as 1924, Purdue University began researching farm electrification. The Purdue program, which was backed by the state's investor-owned utilities, had come up with 49 specific uses for electric power on the farm by 1930.

Still, by 1935, only 35 percent of the state's residents had electricity. The vast majority of electric power customers were located in cities and towns. Five times as many Indiana farms had telephones in the 1930s as had electricity and 10 times as many farms operated gasoline tractor-powered generators as had electric power.

The problem was simply one of economics. Existing electric utilities had been able to electrify Hoosier cities quickly because of the population density in urban areas. It cost

$700 to $1,000 for each mile of distribution line down a city street or boulevard. That mile of line often served several hundred customers.

In the rural areas of Indiana, where the density was often only four farms per mile, the cost of serving each farmer was as much as $250. Wiring an individual farm cost an additional $30 to $100. That was an immense amount of money in the 1920s when corn sold for less than 50 cents a bushel.

Indiana farmers found themselves mired in a depression for much of the 1920s. Agricultural commodity prices had shot up during World War I, but a postwar farm depression in the early 1920s reduced prices to their lowest levels in 40 years. In 1925, less than 350,000 of the nation's 6.5 million farms had electric service.

Because farming was such a precarious undertaking in the 1920s, utilities often had to overcome the resistance of farmers themselves to signing up for electric power. Utility executives spoke ruefully of having to show farmers a $6 return on a $5 investment.

THE SAD IRONS

What was apparent to many of the state's farmers in the 1920s was the backbreaking nature of farm life. Farmers worked from sunup to sunset in the heat of the summer and in brutal below-zero winter winds. Kerosene lamps lighted farmhouses and barns. Farmers drew water by hand pumps for drinking and bathing. The farm wife cooked meals on a wood- or coal-fired stove. Cows were milked by hand. Farmers cut silage and pitched it into barns by hand.

The farm homemaker paid perhaps the steepest price for the absence of electricity. City homemakers enjoyed a wide range of labor-saving electric appliances from the late 1880s on. Appliance manufacturers introduced the electric fan in 1887, the electric iron in 1895, the electric range in 1898, the electric toaster in 1905 and the electric washing machine in 1907. The electric vacuum cleaner was introduced in 1908, the electric refrigerator in 1913 and the electric water heater in 1914.

For the Hoosier farm wife, maintaining a home was a grueling, 24-hour-a-day occupation. Cooking, washing and ironing — chores that modern America gives little thought to, thanks to electric power — occupied much of the farm wife's day and week.

The election of Franklin Delano Roosevelt to the White House in 1932 paved the way for establishment of the Rural Electrification Administration.

The wood-fired stove had to be stoked continuously, even in the hottest weather. Water for cooking and washing was heated on the stove, which held a separate compartment for baking bread.

Washing and ironing clothes was a daunting task. Two or three washtubs of soapy and rinse water had to be filled and re-filled. A hand-cranked wringer attached to one of the tubs removed excess water. Flat irons — monstrous 10-pound pieces of steel with a wooden handle — were heated on the stove. Farm wives called them "sad irons."

"Sad irons were heated on top of the kitchen stove," Decatur County farm wife Lorene Shirk told the Indiana Extension Homemakers Association in a 1984 interview. "Some were made in one piece, and some were made with removable handles. As one iron cooled while ironing, another heated. Sometimes three irons were used, so that a hot iron was sure to be ready without any waiting."

Florence LaGrange of Perry County remembered that "ironing was an all-day thing, and I'd iron by the range and just burn up." Grace Hawkins of Martin County noted that "the worst thing in the world was using them old irons with the rags on the handle." Emily McConnell of Monroe County recalled her dad saying that "we washed one day and ironed the rest of the week."

HAIL THE REA

On a cold, windy afternoon in the second week of January 1936, a group of people with shovels gathered on the corner of Noble and Lebanon Streets in Lebanon, northwest of Indianapolis. Morris L. Cooke, a Philadelphia engineer who President Franklin Delano Roosevelt (FDR) had appointed to head the newly formed federal agency, the Rural Electrification Administration (REA), the previous year, reached down and hoisted a shovel-full of dirt to the strains of music from the 139th Field Artillery Band.

Cooke was in Lebanon to help Boone County Rural Electric Membership Corporation (REMC) set the first pole in the REA system. The pole, and millions like it that would be set across the U.S. in the following years, would bring low-cost electric power to America's farmers.

"We are starting to build the first unit of a country-wide rural electrification project,"

Long-time Hoosier Energy Board Member Riley Osborne was another of the rural electrification pioneers in central and southern Indiana.

Cooke told more than 250 people gathered for the groundbreaking. “Even this first unit means a great deal to workers and businessmen of Boone County. It means a lot more to workers and businessmen in practically every state in the Union.”

By May, the first 60 miles of line were energized north and west of Lebanon. Within a year, Boone County REMC was serving more than 2,000 farm families.

Electric power came to Indiana farms and the nation through the collective efforts of farmers working together. Roosevelt’s election as president in 1932 occurred in

Distribution poles had to be cut, hauled and peeled before early rural electric cooperatives could string wire to farm houses.

the midst of the worst economic depression in the nation's history. Roosevelt's New Deal moved quickly to put people to work and to break up the corporate monopoly that had held the nation in thrall since the 1890s.

Roosevelt set about regulating the electric utility business so that affordable electric power was available to all elements of society, including rural America. In his first term, FDR created the Tennessee Valley Authority (TVA) to bring the benefits of hydroelectric power to the chronically impoverished mid-South. In 1935, Roosevelt's New Deal broke up the electric utility holding companies.

Following its inception in 1935, the Rural Electrification Administration promoted its simple mission of bringing electricity to America's rural areas.

That same year, FDR created the REA as a separate federal agency through the Emergency Relief Appropriations Act of 1935. Roosevelt named Cooke to head the new agency and gave him a simple charter: To supervise the electrification of the more than six million U.S. farms that had no electric power. At the time, Cooke's analysts estimated that 90 percent of U.S. farms were in need of electrification.

Cooke and his staff soon determined that the cooperative form of business, in which farmers had been banding together to mill grain and purchase agricultural supplies for more than half a century, posed the best model for rural electrification. REA officials reasoned that farmer cooperatives could come together to erect transmission and distribution lines and finance their construction with low-interest federal loans.

Within months of Cooke's 1935 decision to make REA loans to farmer cooperatives, loan applications began flooding into the agency's office in Washington, D.C. Boone County REMC's application for a $568,000 loan was among the first to cross Cooke's desk.

The Rural Electrification Administration's first three administrators posed for a rare photograph at the swearing-in ceremonies for Harry Slattery (center). On the left is Morris L. Cooke, the REA's first administrator; on the right is his successor, John Carmody.

RURAL ELECTRIFICATION IN SOUTHERN INDIANA

Between 1936 and 1941, most of the systems that would later form Hoosier Energy created distribution cooperatives and built and energized lines to farmer members. Fayette-Union County REMC executed articles of incorporation in May 1936 and received its first REA loan of $108,000 in the summer of 1937. The co-op set up headquarters above Driggs Shoe Store on the north side of the square in Liberty.

In 1938, the manager of Fayette-Union County REMC asked local farmer Donald Davis to serve on the cooperative's board. Davis accepted and served as director for the next 51 years. As early as 1936, Davis and several other young farmers in Franklin County went door-to-door, signing up friends and neighbors for co-op membership. Davis didn't have enough signatures to start an REMC in Franklin County, but Fayette-Union was glad to add the signatures to its loan application.

"Our primary concern was to just get the electricity out to rural residents," Davis said

in 1989. "In fact, now Franklin County has more members than any of the other counties Fayette-Union County REMC serves."

The Fayette-Union County REMC story was replicated all over central and southern Indiana. Bartholomew County REMC in Columbus energized its first lines in the fall of 1938, and Decatur County REMC in Greensburg set the first pole in June 1939. By that time, Johnson County REMC in Franklin had more than 1,100 members. Rush County REMC in Rushville, the home of utility holding company executive and 1940 Republican presidential candidate Wendell Willkie, energized its first lines in the spring of 1938.

The lineman for the REA became a folk hero in rural America in the 1930s and 1940s.

Shelby County REMC in Shelbyville was among the first Indiana cooperatives to formally organize, having filed incorporation papers in July 1935. Southeastern Indiana REMC in Osgood set its first pole in May 1939, and Wayne County REMC in Richmond first energized lines in the spring of 1938.

When REA project signs went up, farmers in the vicinity knew that affordable power was on its way.

A number of factors contributed to REA's early and rapid success. Hoosier farmers found that by working together, they could achieve anything they set out to do. The Roosevelt Administration swung its considerable might behind the

In order to get electricity at the lowest possible cost, rural people had to cooperate with each other to erect poles and distribution lines, like these southern Indiana farmers in 1939.

cooperative movement. And Cooke and his staff of brilliant young engineers designed a standard single phase line with lightweight, tough poles that reduced the cost of building rural distribution lines to just over $500 a mile, half what it cost investor-owned utilities to build rural lines.

TURNING ON THE LIGHTS

For the lucky farmers who lived along the spreading web of REA lines, the day the electric power was turned on to the house was forever after known as “E” day. Cooperative members who received electricity in December always remembered the

first time they lit the Christmas tree with electric lights. Farm wives in southern Indiana positively exulted in the new labor-saving appliances made possible by electricity.

"My husband couldn't wait," said Thelma Fox, a Shelby County REMC member. "He had me an iron bought. And for Christmas that year, I had to have a Mixmaster and an electric refrigerator."

Ethel Meyer, a member of Southeastern Indiana REMC, recalled that "our first buy was an electric refrigerator. We thought we were really lucky." Marie Weber from Rush County REMC remembered stocking up before the power even got to her farm. "The first thing I got," Weber said, "and I had them spoken for, was a little radio and a vacuum cleaner. Those were the two things I wanted the most, because I had them bought before we had electricity."

Electricity transformed life on Indiana farms in the latter half of the 1930s. As the Great Depression waned and farm prices picked up, few farm families begrudged the $2.50 a month they paid for their electric service. Elsie Canary of Johnson County REMC remembered a lesson from the time at her Extension Homemaker's Club. "So many people thought we couldn't afford it," Canary said, "and the lesson was 'We Can't Afford Not to Use Electricity.'"

The Japanese attack on Pearl Harbor in December 1941 halted the extension of rural electrification in the U.S. Copper, steel and aluminum were needed for the war effort, and most Indiana cooperatives struggled to keep existing lines energized. Still, the rural electrification efforts of the previous five years paid off handsomely. American farmers were able to boost production by more than 25 percent between 1941 and 1945, thanks to the increased number of electrified farms.

Darning socks by electric light was a delight, compared to working with a kerosene lantern.

The postwar era saw far more farms electrified. By 1948, as many as 40,000 farms a month were being hooked up to REA lines. By the end of the decade, it was estimated that 80 percent of the country's farms had been electrified.

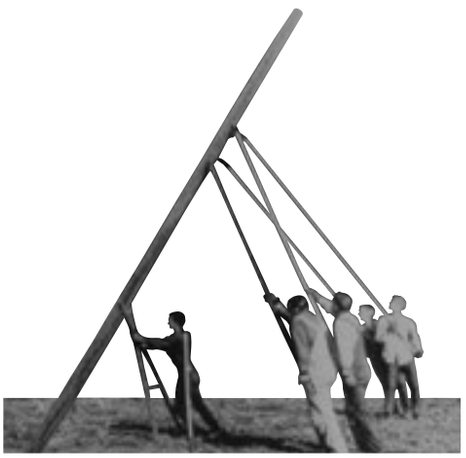
By 1949, it was becoming apparent to cooperative officials in southern Indiana that action was needed to assure a reliable, low-cost electric power supply. Since the formation of the first Indiana REMCs in 1936 and 1937, cooperatives had bought their power wholesale from several investor-owned electric utilities serving the state. Power costs in 1949 were going up, and reliability was going down. Electric cooperative leaders pondered the issue and came up with an innovative solution. The answer involved banding together to create another kind of cooperative.

Rural electric cooperative distribution poles winding down a lonely country road made life better in the 1930s and 1940s for the residents of rural America.

CHAPTER THREE

THE EARLY YEARS: COOPERATION AMONG COOPERATIVES

On a late spring morning in 1949, a dozen rural electric cooperative managers and directors met at Wilhelm's Cafe across the square from the Rush County Courthouse in Rushville. There they planned the logical next step in the rural electrification of Indiana.



The participants in that June 8, 1949, meeting had been studying the power supply situation in southern Indiana for better than two years. "We had many meetings before we really decided to organize Hoosier Energy," Donald Davis, the organization's first secretary, recalled in 1989, "but we always met at Wilhelm's Cafe in downtown Rushville."

Rural electric cooperative leaders met at Wilhelm's Cafe in Rushville, where they signed the articles of incorporation for Hoosier Energy.

The electrification of Indiana's farms and rural areas had been largely accomplished by the late 1940s. But electric cooperatives in the southern half of the state were still confronting problems finding a reliable power supply at a fair rate.

"Our primary concern was just to get the electricity out to rural residents," Davis explained. "However, the rural electric cooperatives in southern Indiana were purchasing power from neighboring commercial power suppliers at more than wholesale rates. In addition to higher rates, restrictive terms and conditions limited our operating efficiency."

Both the 1935 Indiana legislation that authorized rural electrification by cooperatives in the Hoosier state, and federal administrative rules that governed the Rural Electrification Administration, allowed electric cooperatives to band together to create what were known as generation and transmission cooperatives. The "G&Ts," as they became known, enabled a group of distribution systems to join together, obtain REA financing and build generation and transmission systems to meet wholesale power needs. The National Rural Electric Cooperative Association (NRECA) called the concept "cooperation among cooperatives."

The first generation and transmission cooperative was organized in 1936. Ten years later, there were half-a-dozen G&Ts across the nation, most in Texas, Iowa and Wisconsin. On June 8, 1949, Hoosier Cooperative Energy Inc. became Indiana's first generation and transmission cooperative.

Managers and directors of central and southern Indiana distribution cooperatives met with officials of Indiana Statewide in Indianapolis in October 1945 to discuss power supply issues. Four years later, many of the same managers and directors met in Rushville to form Hoosier Energy.

When Hoosier Energy was formed in 1949, the new power supply cooperative occupied offices at Rush County REMC in Rushville.

Incorporators represented eight southern Indiana cooperatives and one Ohio system. Besides Davis of Fayette-Union County REMC, Hoosier Energy incorporators included Ralph W. Poulton of Morgan County REMC, Chester A. Meal of Rush County REMC, Willard Green of Johnson County REMC, Ralph E. Williams of Decatur County REMC, J. Robert Peek of Shelby County REMC, Walter A. Clevenger of Wayne County REMC and Walter Underwood of Southeastern Indiana REMC.

The incorporators elected Rush County REMC's Meal the first chairman, designated the Rushville office of Rush County REMC as headquarters of the new power supply cooperative, and named an 11-member board of directors. The first annual meeting of Hoosier Cooperative Energy was set for June 1950.

One other incorporator was Butler REC of Hamilton, Ohio. Located just across the state line, Butler faced many of the same power supply problems as its neighboring rural electric cooperative, Southeastern Indiana REMC. But when the incorporators filed papers with the Indiana Secretary of State's office in the second week of June 1949, questions were immediately raised about interstate commerce complications. Butler REC reluctantly agreed to withdraw from the newly formed G&T in early summer 1949.

BUILDING LOAD

For most of the first 10 years of its existence, Hoosier Cooperative Energy existed largely on paper. It shared office space with Rush County REMC and Chester Meal, Rush County REMC's board chairman, carried on in the role of chairman of the board of Hoosier Cooperative Energy.

Meal, Davis and the board relied upon the bright, young and energetic managers of the G&T's member cooperatives, including Frank Ratts of Southeastern Indiana REMC in Osgood, Ray Forkner of Rush County REMC and Harold W. Eaton of Morgan County REMC, for advice and engineering and administrative expertise.

Ratts, a native of Salem, was already a 15-year veteran of Indiana's rural electric program when Hoosier Cooperative Energy was formed. He began his utility career at the age of 20 working in construction for Carolina Power & Light Co. while attending North Carolina State University in Raleigh. Years later, Ratts often laughed about digging ditches for the power company for 17½ cents per hour.

Ratts returned to Indiana during the depth of the Great Depression and worked as a wiring contractor for REMCs then springing up in Shelby and Bartholomew counties. "I was teaching farm boys how to do electrical work, how to wire their homes," he explained years later. "We often forget how poor southern Indiana was at that time."

Stringing distribution line by hand was a primitive and time-consuming method, but it got the job done.

In 1941, Ratts was named manager of Southeastern Indiana REMC. While there, he quickly established a reputation as a forceful leader and innovator. The southern part of the state was then gripped by a blight that killed thousands of native chestnut trees. Ratts figured that the

dead trees would make good line poles, so Southeastern Indiana REMC began buying them by the railcar lot. "We built over 2,000 miles of line," he said in a 1988 interview.

After the late 1930s, the REA panel truck with an A-frame pole attachment was an increasingly common sight in central and southern Indiana.

Early in his career at Southeastern, Ratts started researching the distribution cooperative power supply problem. During World War II, he was in contact with Franklin Wood, REA's chief power engineer, who shared his findings about cooperative-owned transmission systems with Ratts.

Ratts and Walter Underwood, Southeastern's board chair, were early proponents of forming a generation and transmission cooperative. Southeastern served consumers in Indiana's rugged limestone hills north and west of Cincinnati, Ohio. Southeastern's wholesale power supplier at the time, Public Service Co. of Indiana, Inc. (PSI), was located in Plainfield, west of Indianapolis. The REMC was literally at the end of PSI lines, and Underwood and Ratts frequently had reason to complain about PSI's poor service, reliability and high costs.

Hoosier Cooperative Energy came into being because of the intransigence of the public utilities. Ratts often noted that the REMCs weren't treated as important customers by investor-owned utilities in the immediate postwar years.

The original Hoosier Cooperative Energy members were served by two of Indiana's major investor-owned utilities, Southern Indiana Gas & Electric Co. in Evansville and

Public Service Indiana, the major wholesale supplier to electric cooperatives in the state.

During the late 1940s and the 1950s, PSI charged the second highest wholesale power costs of the state's five major investor-owned utilities. PSI endured some rough years during the 1930s and 1940s. The company was part of Chicagoan Samuel Insull's utility empire, which had gone into receivership in 1932. Money had been tight for the company throughout the Great Depression and World War II, and in 1945, PSI was forced to spin off its gas utility operations as part of its settlement of the receivership and Public Utility Holding Company Act decrees.

THE GROWTH OF RURAL ELECTRIFICATION

While PSI struggled to find capital to build generating stations, transmission lines and substations, electric cooperatives in southern Indiana were undergoing dramatic growth. By 1951, there were 43 REMCs in the state with a total of more than 132,000 consumer members. Just 15 years earlier, only one Indiana farm in 10 had been served with central station electric power. "Plenty of power is needed in Indiana," the editors of Indiana Rural News observed in the summer of 1951.

The reality was that by the early 1950s, farm and agriculture loads for most Indiana rural electrics continued to increase dramatically each year. Farmers discovered that electric power not only improved their lives, it made their farm businesses more efficient.

The experience of Alvin Ruxer of rural Jasper was typical. Ruxer, a member consumer of Dubois REC, began farming in 1949. With only two employees, Ruxer operated a dairy herd and milking operation that would have required a dozen hired hands before electrification. Ruxer put electricity in his loafing barn and milking parlor, pumping milk directly from the 75 cows to stainless steel storage tanks. Hay-drying, silage storage and manure spreading — once backbreaking labor-intensive tasks — were all handled by machinery run by electric power.

Ruxer's monthly power bill for 1,700 kilowatt-hours of electricity rarely exceeded $50. "Where could I hire 10 men at $50 a month?" Ruxer asked a reporter. "Electricity is the very heart of this farm."

Dubois REC would join Hoosier Cooperative Energy in the 1950s precisely because

of the Jasper cooperative's concern about load growth on the farm. But Dubois REC, as well as other rural electrics across southern Indiana, also was concerned in the 1950s about the growth of industrial and commercial loads.

Being able to conduct business in the early morning and late evening hours under bright lights supplied by the local electric co-op was one of the added benefits brought about by rural electrification in Indiana.

When American Louisiana Pipeline Co. announced in 1952 that it was building a thousand-mile natural gas pipeline from the southern U.S. gas fields to Detroit, it decided to build a pumping station a quarter-mile south of Celestine in Dubois County. The pumping station would be capable of moving 500 million cubic feet of gas a day through the pipeline to the northwest. Dubois REC fed the transformers for the pumping station and auxiliary diesel generator from two different substations.

Once on line, the pumping station would run 24 hours a day, seven days a week, and would become the cooperative's largest load. Bert White, then manager of Dubois REC, explained that farm electrification inevitably created a demand for rural industrial development.

"We also want to encourage new industry in rural areas," White said. "It provides off-the-farm employment for members of farm families. As farms become more and more mechanized, we see the need for more rural jobs."

The phenomenon of industrial and commercial development popped up all over rural southern Indiana during the 1950s. In 1952, the owners of Wyandotte Caves, a popular local tourist attraction, contracted with Harrison County REMC in Corydon to supply electric power for a new lighting system in the caves.

By 1953, the biggest load on the Southeastern Indiana REMC system was the locks at Markland Dam on the Ohio River. Operated by the Louisville District of the U.S. Army Corps of Engineers, Markland Dam in Switzerland County averaged more than 300 lockages a month.

And each lockage to allow a tug pushing a string of barges up or down river used electricity. Since the dams were often located in rural areas, they were likely to be supplied with electric power by a local rural electric cooperative.

IOUs BECOME UNEASY

Frank Ratts noted in a 1992 interview that Southeastern Indiana REMC's contract with the Corps of Engineers to supply electric power to Markland Dam created friction with PSI. Neither PSI, Cincinnati Gas & Electric nor Kentucky Power liked the fact that the Corps of Engineers had contracted with an REMC to supply power to the Ohio River dams, Ratts said.

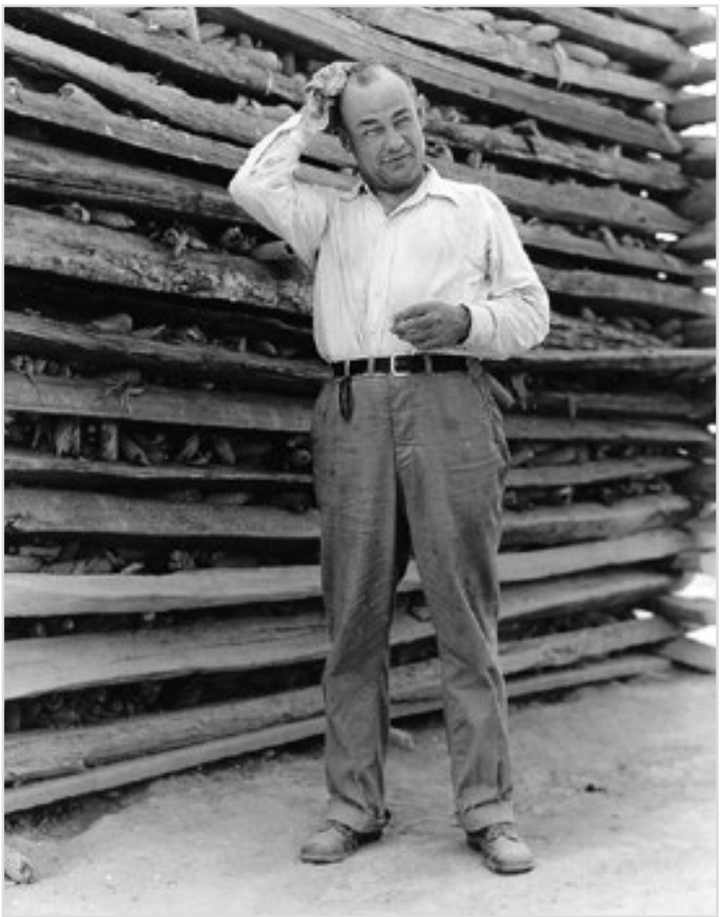
Investor-owned utilities across the nation reacted with alarm to the 1950s growth of electric cooperative load. For the most part, the investor-owned utilities had accepted the establishment of the REA in 1935, reasoning that if they couldn't serve farm loads profitably, then neither could rural electrics. In a sense, the investor-owned utilities believed their own propaganda from the 1920s and 1930s that serving rural loads would never be worthwhile.

When rural loads proved to be larger and faster growing, the investor-owned utilities realized that they had miscalculated and went on the attack. REA, the Tennessee Valley Authority and other federal preference power projects were simply socialistic and a threat to the American way of life, they charged in magazine advertisements, at industry conferences and in countless speeches. For most electric co-ops, the 1950s ushered in an adversarial era, a time when relationships with their investor-owned power suppliers were strained.

Robert A. Gallagher, chairman and Chief Executive Officer of PSI through much of the decade, was a leader of the investor-owned utility industry's campaign to convince Americans that government ownership of the power industry was only one step away

from socialism. Gallagher, a Chicago accountant, had come to Indiana in 1937 with the task of reorganizing PSI.

By the mid-1950s, Gallagher had done his job. He had built a thriving electric utility that served 360,000 customers in 70 of Indiana's 92 counties — and provided electric power at wholesale to most of Hoosier Cooperative Energy's member distribution cooperatives in southern Indiana.



Claude Wickard was administrator of the Rural Electrification Administration when Hoosier Energy was founded. He was a Carroll County, Indiana, farmer who served as Secretary of Agriculture and later Administrator of the REA under President Harry Truman.

When PSI joined the Edison Electric Institute's national advertising campaign in early 1952 warning Americans against the evils of government ownership in the power business, Ratts dropped Gallagher a letter to question the advertising campaign's goals.

"The National Advertising program is definitely NOT intended to attack or reflect upon the rural electrification movement," Gallagher responded to Ratts in February 1952. "This company supports the national advertising program because it is aimed at socialization of American industry and American property, in which we do not believe. But we DO believe it is a distinct and growing threat to us, in our industry; AND TO YOU in agriculture."

Gallagher went on to pledge to Ratts that PSI would continue to serve Southeastern and the other Hoosier Cooperative Energy members. But Gallagher hedged on the

possibility of writing contracts longer than five years.

For Ratts and other rural electric managers in southern Indiana, the five-year contracts were a real sore point. Without longer-term contracts, the REMCs couldn't adequately plan for the future.

Chester Meal, Hoosier Cooperative Energy's chairman, had been concerned about the short five-year term of the contracts, restrictions on service and reliability of power supply since Hoosier Energy was formed in 1949. He wrote PSI Vice President F.D. Danielson a letter asking 10 questions about service restrictions.

"In view of present conditions," Meal wrote, "we feel that we must have a reply to these questions not later than May 21, 1951. If a reply is not received by the above date we must assume that you are not interested."

A TIME FOR GENERATION

The election of Dwight D. Eisenhower as United States President in 1952 brought home to cooperatives across Indiana and the nation that rural electrification was still subject to partisan politics.

In early 1953, REA Administrator Claude Wickard resigned under pressure from the Eisenhower Administration. Wickard, a popular farmer and well-liked public official from Carroll County, Indiana, had served the Roosevelt Administration as secretary of agriculture during World War II and had been appointed REA administrator by President Harry Truman in 1945.

Eisenhower nominated Ancher Nelsen to replace Wickard. Nelsen, a former lieutenant governor of Minnesota, would be more conservative than Wickard, but as a longtime member consumer of the McLeod Power Association in Glencoe, Minnesota, he took the vitality of the nation's electric cooperatives seriously. In one respect, Nelsen would take the REA in a new direction.

"The big expansion will be in generation," Nelsen said shortly after his March 30, 1953, appointment, "where we have to see that farmers can build the facilities to provide an adequate supply of wholesale power at the lowest possible cost. I don't mean by this that we should promiscuously promote the construction and expansion of

cooperatively-owned generation and transmission facilities. Cooperatives should purchase their wholesale power requirements from private concerns when their needs are being economically and adequately met."

By 1953, the members of Hoosier Cooperative Energy didn't feel their needs were being economically and adequately met by private power suppliers in Indiana. Meal, Davis and Ratts were already contemplating applying for REA financing to build a generating station and transmission system in southern Indiana.

In 1953, Meal joined more than 100 Indiana electric cooperative directors and managers on a mission to Washington, D.C. The group, all members of the Indiana Statewide Rural Electric Association, made it a point to touch bases and discuss power supply issues with all members of the Indiana Congressional delegation.

At the 1954 annual meeting of Indiana Statewide, Meal reported that he and several Hoosier Cooperative Energy directors had attended a dinner with a number of Indiana congressmen.

"The results of this meeting were very gratifying," Meal told delegates to the annual statewide convention. "Subsequently, one congressman, meeting with a group of us here in Indiana, said he would support fully a program of the REMCs to build and operate a generation and transmission system to serve our co-ops with power."

The idea of transforming Hoosier Cooperative Energy into an operating generation

Ancher Nelsen, a Minnesota dairy farmer, succeeded Wickard as REA administrator when President Dwight D. Eisenhower took office in 1953.

E-day on a farm in southern Indiana. Most rural Hoosiers who were alive at the time can still remember the day that the local distribution cooperative hooked up their farm with electric power.

and transmission cooperative was now on the table. It would take nearly two decades embroiled in controversy and legal and political maneuvering to move the idea from the table to reality.

DONALD DAVIS

In the 65-year history of Hoosier Energy, only one Chairman of the Board has served more than three terms.

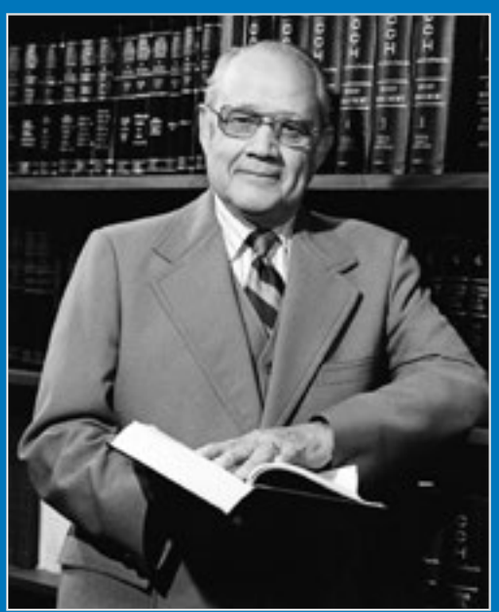
From 1978 to 1984, when Hoosier Energy addressed the complex task of building and financing the Merom Station, the directors turned to Donald Davis to provide the leadership that the board and cooperative demanded.

In many ways, Davis typified the cooperative spirit in Indiana. Born on a Franklin County farm in 1909, Davis helped sign up neighbors for Fayette-Union County REMC in 1936 and went on to join the cooperative's board of directors in 1938. In 1943, he was elected president of the Fayette-Union County REMC board of directors, a position he held for the next 37 years.

Along with rural electric cooperative pioneers like Riley Osborne and Chester Meal, Davis was one of the men who met in Rushville in 1949 to incorporate Hoosier Energy. Davis was associated with the power supply cooperative for the next 40 years. His fellow board members turned to him to head the cooperative's board of directors with skill and aplomb from 1978 to 1984.

Donald Davis also served as a member of the Indiana Statewide Board of Directors for more than 40 years and was honored with that organization's 50th Anniversary Pioneer Award in 1984.

Davis died in June 1989, at the age of 80, just one week past the 40th anniversary of the power supply cooperative he had helped found. "Throughout his time with Hoosier Energy," a Hoosier Energy publication eulogized, "Donald Davis proved himself a champion of the rural electric program, forsaking singular gain and recognition for the good of many. While he leaves an abundant legacy for us all to share, it's sad to say goodbye. We will miss him greatly."



Donald Davis was a young farmer near Brookville in 1935 when he started soliciting neighbors to join up with Fayette-Union County REMC.

CHAPTER FOUR

THE BATTLE FOR RATTS STATION

After examining its power supply situation for the better part of eight years, Hoosier Cooperative Energy took the fateful step of becoming a true generation and transmission cooperative.

On May 10, 1957, Hoosier Cooperative Energy applied to the Rural Electrification Administration for a $42 million loan to build a 198,000-kilowatt generating station in southwestern Indiana and construct 950 miles of transmission line across the southern half of the state. The loan application stated that the generation and transmission system would provide the wholesale power requirements of the eight original members of the organization.

Hoosier Cooperative Energy had been working to convince another dozen electric cooperatives in southern Indiana to join the G&T, and the REA loan application filing had the desired effect. During the summer and fall of 1957, eight more REMCs joined the new power supply venture. They included Daviess-Martin County REMC, Dubois REC, Harrison County REMC,

Knox County REMC, Orange County REMC, Southern Indiana REC, Sullivan County REMC and Utilities District of Western Indiana REMC.

Chester Meal, Frank Ratts and the Hoosier board spent much of 1958 and early 1959 revising the application to reflect essentially a doubling of size of service territory and load. On August 24, 1959, Hoosier filed a new application with REA for a loan amount of $53,872,000. The loan documents called for the same size generating plant, but the transmission line network had been expanded to nearly 1,400 miles.

The loan application for the Petersburg plant was the largest submitted to the REA. Unbeknownst to anyone in Indiana, the approval process was held up by infighting in the U.S. Department of Agriculture. There was precedent for the loan. Several G&Ts had applied for and received loans for building generating stations and transmission networks during the 1950s.

Most had been approved by David Hamil, President Eisenhower's appointee as REA Administrator. Hamil, a Colorado rancher, who had replaced administrator Ancher Nelsen in 1955, was for the most part understanding of cooperative power supply needs and G&T plans to build generating facilities.

But the threat of competition from rural electric cooperatives spurred investor-owned utilities across the nation to put pressure on the Eisenhower Administration to deny. Ezra Taft Benson, Eisenhower's Secretary of Agriculture, instructed underlings not to forward Hoosier Cooperative Energy's application to Hamil's office.

Benson's attempts to override Hamil's authority turned into a hot congressional battle in 1959. U.S. Senators John F. Kennedy of Massachusetts and Hubert Humphrey of Minnesota co-sponsored legislation to restore Hamil's loan-making authority. The measure passed the House and Senate, but Eisenhower vetoed the legislation in April 1959. Three days later, the House failed to override Eisenhower's veto by four votes.

Clyde Ellis, who was then executive director of the National Rural Electric Cooperative Association (NRECA) in Washington, D.C., learned of the efforts to derail Hoosier Cooperative Energy's loan. "Back in Indiana," Ellis wrote some years later, "the Hoosier power companies had a warm friend in Governor Harold W. Handley. When the matter of the G&T loan was laid before him, he took direct action. He dispatched his

entire state Public Service Commission to Washington to lobby against the loan."

The Indiana commissioners conferred with Senator Homer Capehart and Congressman Charles Halleck who took the commissioners to meet with Secretary Benson. Hamil soon was summoned to a meeting with White House Chief of Staff Sherman Adams, who told him not to approve the loan for Hoosier Cooperative Energy. It was the first in a series of federal and state actions that would delay the Petersburg power plant for more than a decade.

Clyde Ellis, longtime general manager of the National Rural Electric Cooperative Association, smelled a rat in opposition to Hoosier Energy's Petersburg power plant.

Handley's Public Service Commission had become increasingly hostile to the state's electric cooperatives. In 1957, the commission issued a majority order, which forbid rural electrics from serving loads of more than 250 kilowatts. The commission also allowed several investor-owned utilities to increase their wholesale rates to electric cooperatives by nearly 20 percent.

APPROVAL... AND STRUGGLE... AND BRICK WALLS

Although Hoosier Cooperative Energy's power plant project appeared all but dead in the summer of 1959, politics intervened to resurrect it. After the closest presidential election of the 20th century, John F. Kennedy was inaugurated in January 1961. Kennedy moved quickly to reinstate REA and Department of Agriculture officials friendly to cooperatives.

Kennedy appointed Norman Clapp, a Wisconsin farmer, to head the REA. The president specifically ordered Clapp to revive REA's low-interest loan programs as a tool both to continue rural electrification and to combat rural poverty.

Hoosier Cooperative Energy's loan application soon found its way to the top of the pile. On June 15, 1961, Clapp signed the loan that would move the Petersburg generation and transmission project into a construction phase. The final loan documents called for

Editorial cartoons about Hoosier Energy's efforts to build the power plant sprang up in newspapers throughout Indiana.

providing just over $60 million to build the power plant and more than 1,500 miles of transmission line.

And then, as one rural electric cooperative editor put it, "all hell broke loose in Indiana. In a bewildering series of court battles, which saw first one side, then the other win, investor-owned utilities poured millions into a fight against what they called a 'socialistic' scheme."

In 1961, Norman Clapp was appointed to head the Rural Electrification Administration. Clapp, a former newspaper editor, was an activist administrator who helped power supply cooperatives get into generation and transmission.

"It was one horrendous court battle," Frank Ratts recalled in 1992. "We had to start by getting a certificate of convenience and necessity. Then we just kind of hunkered down and took the sleet and storms that came our way." To get the certificate of convenience and necessity, which was mandated by Indiana law, Hoosier Cooperative Energy had to go before the increasingly hostile Indiana Public Service Commission.

In June 1961, Norman M. Clapp signed the largest REA loan guarantee to that time — just over $60 million — for construction of the Petersburg power plant and associated transmission system. Looking on during the Washington, D.C., signing were, from left: Riley Osborne, president of Hoosier Cooperative Energy; Clarence Whitsitt, vice president; and Walter Underwood, secretary-treasurer.

Hoosier Cooperative Energy's loan application had been scrutinized by REA since 1957. The unanimous conclusion in Washington in 1961 was that the G&T's member cooperatives would realize significant savings in wholesale power costs once the Petersburg generating station was up and running.

Even under the best wholesale electric rate offers of investor-owned utilities, the member distribution co-ops still would save 20 percent or more on power costs

with the new generating station. More importantly, members would control a reliable supply of power for current and future loads.

On December 7, 1961, the 20th anniversary of the Japanese attack on Pearl Harbor, Hoosier Cooperative Energy applied to the Public Service Commission of Indiana for a certificate of convenience and necessity to build the Petersburg plant. Within days, Indiana's five investor-owned utilities had all intervened in the case to oppose the certificate.

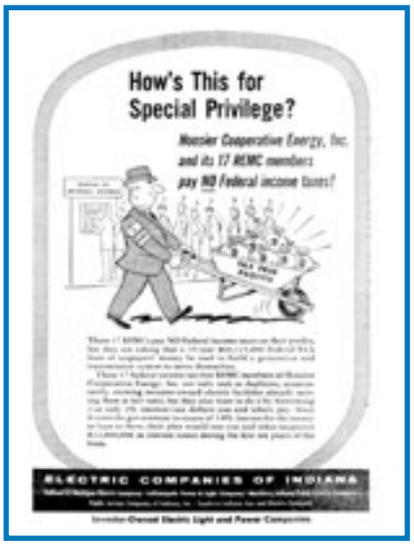
PSI and Southern Indiana Gas & Electric unveiled an advertising campaign during the summer of 1961 that attacked the Hoosier Cooperative Energy proposal. The theme of the advertising messages concluded that the two-percent loans offered by the REA since 1944 were a taxpayer subsidy.

"Taxpayers: Call a Halt to This Wasteful Non-Defense Use of Your Tax Dollars," one pamphlet published by the Electric Companies of Indiana, a state trade association, screamed in 1962. "Rural Electric Co-ops Get a Big Break on Property Taxes" and "Rural Electric Co-ops Pay No Federal Income Taxes," charged a 1961 PSI advertising campaign.

Electric cooperative managers in southern Indiana recognized how high the stakes really were. Bert White, a former manager of Dubois REC and an unpaid assistant to Frank Ratts in the early 1960s, explained to an Indiana legislative subcommittee years later what would have happened if the Petersburg plant were halted. If PSI succeeded in blocking the plant, White said, "the Lord only knows what would happen. But I do know one thing. The rates would go up damn quick."

In 1961 and 1962, Hoosier Cooperative Energy spent nearly $1.5 million to counterattack the charges against it and to prepare documentation for the certificate of convenience and necessity.

The G&T was still a paper operation with few assets save the faith and good credit of its distribution cooperatives. Robert Peek of Shelby County REMC had taken over from Chester Meal as chairman of the board and moved the cooperative's offices to Shelbyville. Ratts, who still served as general manager of Southeastern Indiana REMC, carried on the business of Hoosier Cooperative Energy.



During the summer of 1961, Indiana's investor-owned utilities poured millions of dollars into an advertising campaign against Hoosier Energy, claiming the co-op's intent to build a power plant was a "socialistic scheme."

Hoosier Energy spent nearly $1.5 million to counterattack the ads placed by the investor-owned utilities.

Lawyers for Indiana Statewide Rural Electric Cooperative, the service association of the state's REMCs, were concerned that the Public Service Commission would reject the certificate on the grounds that Hoosier Cooperative Energy wasn't an REMC under the terms of the 1935 Indiana Rural Electric Membership Corporation Act. Attorneys for Indiana Statewide pointed out that the association had been granted the necessary authority to generate and transmit electricity under the 1935 act.

In April 1962, Hoosier Cooperative Energy and REA Administrator Norman Clapp agreed to assign the previously approved loan to the statewide association. Indiana Statewide then created the Hoosier Energy Division within the statewide association. Hoosier Energy, as it became known after 1962, did not have a board of directors as such while it was a division of the statewide. But in practicality, an operating committee of Hoosier Energy Division member-representatives functioned as the board.

Hoosier Energy held groundbreaking for the Petersburg plant on May 14, 1962, and the entire community and Pike County turned out for the occasion. But the celebration was short-lived. Four days later, Indianapolis Power & Light Co., which wanted to build a power plant on the White River a few miles above the Petersburg plant, filed a complaint in Pike County Circuit Court seeking an injunction against the Hoosier Energy plant.

On May 23, 1962, Southern Indiana Gas & Electric Co. filed suit in Marion County Circuit Court in Indianapolis seeking a similar injunction against the Petersburg plant. And on June 1, 1962, PSI filed a third suit seeking an injunction against the planned generating station.

It would be more than two years before the three cases wound their way through the courts. Demand for electricity grew at a rapid 10 percent annual pace in Indiana during the 1960s, and Hoosier Energy argued that construction of the plant would go a long way toward alleviating power shortages.

"The opposition to the Hoosier plant is strictly to maintain a monopoly, despite the smokescreens they keep throwing up for propaganda purposes about 'socialism,' the 2-percent loans and the 'no federal income tax' bit," Frank Ratts later described the investor-owned utility litigation.

Hoosier Energy's legal team, including Indiana lawyers Ralph Zoercher and Bill

Hoosier Cooperative Energy broke ground for the Petersburg plant on May 14, 1962. Officials pictured are, left to right, Ray Forkner, John Armington, Ralph Zoercher, Clarence Whitsitt and Bert White. Zoercher, Hoosier Energy's outside counsel, spent most of the 1960s litigating investor-owned utility attacks on the project.

Other officials at the May 14, 1962, groundbreaking are, left to right: Riley Osborne; Mayor Otto Grey of Washington; Omar Klipsch, president of the Petersburg Chamber of Commerce; Petersburg Mayor Ray Green; and Frank Ratts.

Parr, and Washington, D.C., attorney Bill Crisp, skillfully guided a defense through the Indiana courts. In 1964, the Hancock County Circuit Court in Greenfield ruled that Indiana Statewide's certificate of convenience and necessity was, in fact, valid. The next year, the same court upheld its decision that Statewide's authority to generate and transmit electric energy was a legislative grant specifically authorized by the 1935 Indiana legislation.

The two court decisions finally spurred REA in August 1965 to release funds from the June 1961 loan approval to begin construction of the Petersburg plant and transmission system. It had been four years since Norman Clapp had signed the loan.

The media closely followed Hoosier Energy's struggle to build the power plant near Petersburg.

Frank Ratts, left, and Riley Osborne watch a bulldozer clear the Petersburg site in 1962. Ratts, who went on to become Hoosier Energy's first full-time general manager in 1965, later said that siting and building the Petersburg plant was one of the most difficult tasks he ever faced.

Riley Osborne, a Knox County farmer who was then serving as chairman of Hoosier Energy's board, asked Frank Ratts to lead Hoosier Energy as a full-time employee. Ratts' first task was to find office space in Bloomington, where the board had decided to locate a headquarters, primarily because of the community's central location. Ratts also started hiring a staff and letting contracts for construction of the Petersburg plant.

403C SOUTH WASHINGTON

When Virgil Peterson came to work for Hoosier Energy as office manager in September 1965, he was only the fifth hire. Peterson, an Enderlin, North Dakota native, had spent 15 years with Cass County REC in Kindred, North Dakota, working his way up to office manager of the cooperative.

Frank Ratts had leased a tiny office at 403C South Washington in Bloomington. Hoosier Energy shared the 800-square-foot office with an insurance agency. Ratts hired Marge Elsey, his secretary from Southeastern Indiana REMC, to handle administrative chores, and Earl Littell, another Southeastern veteran, to purchase right-of-way for transmission lines. Charles Tomes, an experienced dispatcher, was the cooperative's fourth hire, although it would be years before he had the opportunity to dispatch any electric power.

In the fall of 1965, Hoosier Energy let Petersburg plant contracts to Riley-Stoker for the boiler and Brown-Boveri for the turbine generators. Mississippi-based Irby Construction already was setting poles for the transmission lines.

In December 1965, Hoosier Energy, still a division of Indiana Statewide, received a supplemental REA loan for $11.2 million to reflect increases in construction costs and revised plans for the project. Those plans called for increasing the capacity of the Petersburg plant to 232,000 kilowatts from the original 198,000 kilowatts and building 1,700 miles of transmission. A third loan in 1967 was approved to cover further increases. The total cost of the project had risen to just over $100 million.

Litigation tailed off dramatically after 1966, and Hoosier Energy was able to turn to the task of managing the more than 50 subcontractors building the plant and the transmission network. By late 1968, the Petersburg plant was in the final stages of construction and much of the transmission system was nearing completion.

Just when hope began to flicker, legal clouds once again rolled across the horizon. On December 10, 1968, the Indiana Supreme Court overturned a lower-court ruling. In effect, the state's highest court, on a 3-2 split decision, threw out the 1935 Indiana law giving Indiana Statewide the right to generate and transmit electricity.

The Supreme Court decision was a crushing blow. The plant was ready to begin pre-operating testing. It was less than a year from beginning to generate and transmit electric power. One writer called the plant "a $75 million eight ball," and doubted if it would ever open.

But the Hoosier Cooperative Energy legal team had another ace up its sleeve. And Norman Clapp's actions once again revitalized the project. On December 28, 1968, in one of his final acts as REA Administrator, Clapp took the unprecedented step of temporarily transferring ownership of Hoosier Energy to the REA. The papers designated the Hoosier Energy Division of Indiana Statewide as an agent of the U.S. government, responsible for completing construction of the Petersburg plant, energizing the transmission system and operating it for a period not to exceed five years.

From left, Ray Forkner, Walter Underwood, Dewey Barnett and Frank Ratts inspect progress at the plant in 1967.

"Hoosier Energy was about to be torn down, brick by brick," Virgil Peterson said of the events of December 1968. "Going with the government was very aggressive. That move put a lot of pressure on the investor-owned utilities."

Litigation heated up again in 1969. The Federal District Court for Southern Indiana granted an injunction sought by the investor-owned utilities in March, halting work on the Petersburg plant. In September, the U.S. Court of Appeals in Chicago reversed the injunction. The Indiana power companies appealed the decision and asked the U.S. Supreme Court

to review the case.

"We went from one lawsuit into another," Virgil Peterson said. "Whenever we'd win one, we'd just begin another."

A need for power in the Mid-South brought the matter to a head in early 1970. David Hamil, the Colorado rancher who had headed REA during the Eisenhower Administration, had been re-appointed by President Richard Nixon in early 1969. On January 8, 1970, Hamil ordered Hoosier Energy to provide emergency power to the Tennessee Valley Authority when it lost generating capacity in its Kentucky system.

During 1967 and 1968, Hoosier Energy placed full-page advertisements in Indiana newspapers and magazines to assure Hoosiers that the Petersburg power plant would be built, no matter the obstacle.

Four days later, the U.S. Supreme Court refused to review the Indiana power companies' petition concerning the 1969 U.S. Court of Appeals reversal. In March, Hamil directed Hoosier Energy to begin full commercial operation as soon as possible. On April 4, 1970, the Petersburg station finally began operation, nearly nine years after Norman Clapp had authorized the first loan for the plant.

Hoosier Energy was now in the power supply business. But the cooperative spent much of the 1970s working its way out from federal government ownership and addressing new issues created by dramatic load growth. It would mean building a second, larger power plant in Sullivan County.

CHAPTER FIVE

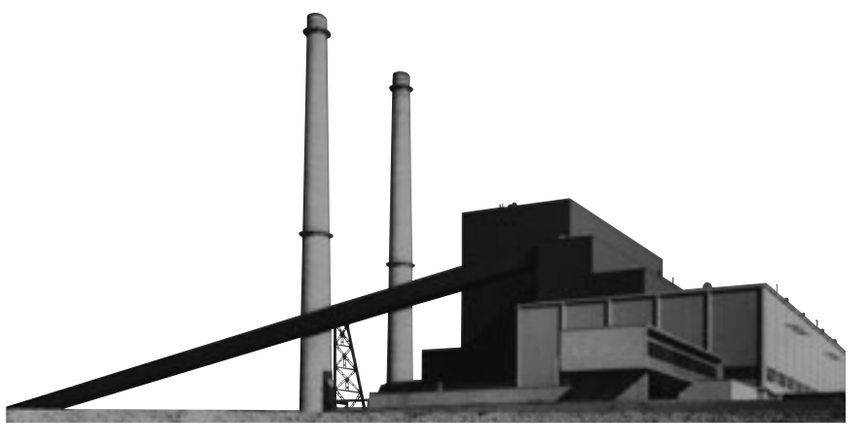
COOPERATION AMONG UTILITIES

On March 9, 1971, Hoosier Energy and its two most bitter opponents in the fight to build the Petersburg plant — Public Service Indiana and Southern Indiana Gas & Electric Co. — announced an interconnection agreement that would finally put much of the decade-old battle to rest. REA Administrator David Hamil hailed the event as "a real milestone for rural electrification."

In truth, Hamil had worked behind the scenes to facilitate the agreement between the warring parties. Worried about power shortages in Indiana, Illinois and Kentucky and other TVA states, Hamil wanted to see the Petersburg plant carrying the load for rapidly growing electricity demand. And the REA administrator wanted the U.S. government out of its ownership position of the Pike County power plant.

"Dave Hamil, to his credit, was ready to help us where he could," explained Virgil Peterson. "We knew that the Nixon Administration restricted him in what he could do."

For their part, executives of PSI and Southern Indiana Gas & Electric Co., the two utilities most heavily involved in the fight against Hoosier Energy had begun to tire of the seemingly never-ending legal maneuvering. Much of the management team



that had started the fight in the late 1950s had retired. Walter Matthews had replaced Bob Gallagher as president and Chief Executive Officer of PSI, and D.W. Vaughn had taken over the reins of Southern Indiana Gas & Electric in 1969.

Both utilities were struggling to keep up with surging demand. Throughout the state, demand for electricity was growing 8 percent a year in the early 1970s. That meant demand was doubling every nine years. Southern Indiana Gas & Electric had plants on the drawing board, as did PSI. The Plainfield utility was also in the early stages of planning for its Marble Hill nuclear generating station in southern Indiana.

David A. Hamil, shown here being sworn in as REA administrator in 1956, had an immense impact upon Hoosier Energy. The Colorado rancher signed the documents ordering the commercial start-up of the Ratts Station in 1970 and approved the initial REA construction loans for the Merom Station shortly before he left office in 1978.

Neither power company could afford to continue the fight with Hoosier Energy. Although there was no public pronouncement, the March 9, 1971, interconnection agreement was a recognition of the changing reality of power company relationships in Indiana.

Under the terms of the 25-year agreement, Hoosier Energy operated the Petersburg plant and nearly 1,300-mile transmission system, along with 113 substations that had been built. The G&T provided a power supply to its 17 member distribution cooperatives, which now had 95,000 consumers in 47 counties.

Hoosier Energy's Petersburg plant would serve as the primary source of power to its members. PSI and Southern Indiana Gas & Electric would sell power to Hoosier Energy to meet requirements above the output of the plant. The utilities also would wheel power over their transmission facilities for mutual benefit. The Hoosier Energy system would have high-voltage interconnections with PSI at Batesville and Worthington, and with

The 1970 dedication of the Ratts Station was a gala affair. In attendance were, left to right: U.S. Senator Gale McGee of Wyoming; David A. Hamil of the REA; U.S. Senator Vance Hartke of Indiana; Indiana Lt. Governor Richard Foltz; Frank Ratts; Dewey Barnett, chairman of the Hoosier Energy operating committee; and Raymond Forkner, vice chairman of the Hoosier Energy operating committee.

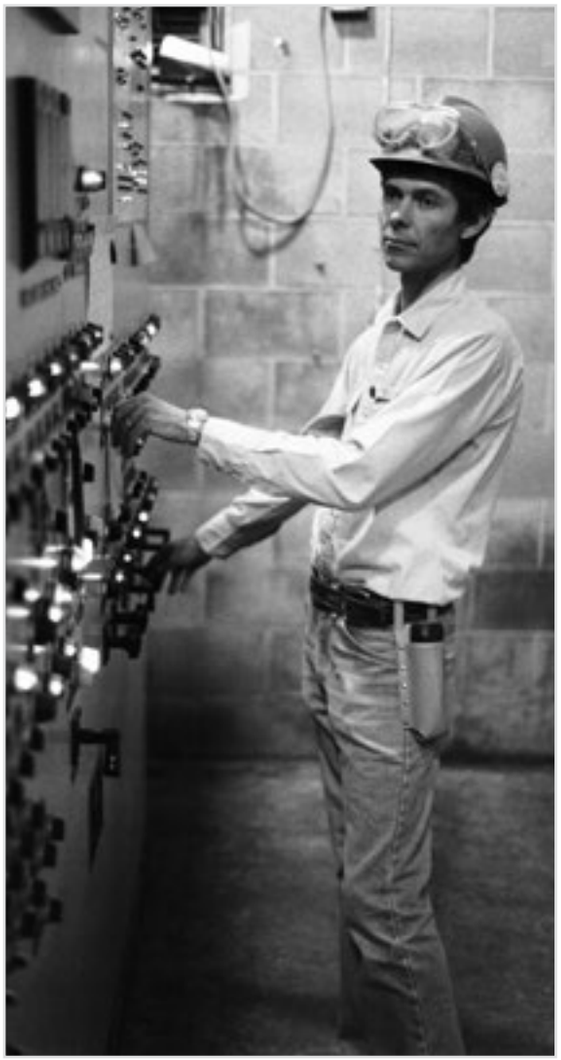
Southern Indiana Gas & Electric at Newtonville. Under terms of the agreement, all litigation pending between the parties would be dismissed.

The interconnection agreement also obligated the investor-owned utilities to support Hoosier Energy in seeking a certificate of convenience and necessity from the Public Service Commission (PSC). Hoosier Energy appeared before the PSC for hearings on June 17, 1971, with PSI and Southern Indiana Gas & Electric officials in the hearing room to lend support, as promised. The hearings were a formality. On June 25, the PSC issued the certificate to Hoosier Energy.

Four days later, General Manager Ratts, members of Hoosier Energy's board of directors and REA officials spent more than three hours signing related documents. By the end of the day on June 29, 1971, REA officially had transferred the deed and mortgage for the Petersburg plant and transmission network to Hoosier Energy and the G&T officially ceased to be an agent of the federal government.

Hoosier Energy members and employees attended the dedication ceremony for the hard-fought Ratts Generating Station.

"It was the dedication of many people involved — directors, managers and our own loyal



Hoosier Energy attracted a well-trained workforce to the Ratts Station in the late 1960s and early 1970s. Many employees who started working at the plant were former coal miners and maintenance workers from the area.

employees — that made today possible," Frank Ratts said at special ceremonies following the official signing of documents.

Almost 10 years to the day after Norman Clapp signed Hoosier Energy's first loan, the G&T cooperative was finally the owner and operator of its power supply network.

A NEW HOME

Hoosier Energy had spent much of the period between 1965 and 1971 ramping up to meet the challenge of operating a business. Litigation was an ever-present fact of life during that era, but preparing the cooperative for its role as a full-fledged operating G&T continued regardless of ongoing legal actions.

Ratts and the board had hired nearly 90 people by the time of the June 29, 1971, signing of the REA and federal ownership release documents. Most employees were administrative, management and line workers who would be needed when the system began operation.

The growing workforce meant finding new, larger quarters. In 1967, the board assigned former Dubois REC Manager Bert White to assess possible sites for a new headquarters. White investigated several locations in downtown Bloomington before recommending the purchase of a several-acre site on State Road 37 about six miles north of the city. The board approved the purchase.

To accommodate the growing workforce, larger facilities were constructed six miles north of Bloomington in 1968. By the end of the year, employees started moving to the new headquarters.

Construction of an office building, garage and maintenance facilities began in early 1968. By the end of the year, employees started moving into the new head-quarters complete with a first floor control facility for plant and transmission system operation.

Meanwhile, Hoosier Energy continued as an agency of the U.S. government. Working for the federal government from late 1968 to 1971 posed relatively few problems. Dennis Robbins, a Bedford native, came to work for Hoosier Energy early in 1969, a month after the cooperative had become an agent of the U.S. government.

"We had one individual from the U.S. Department of Agriculture in our purchasing department," Robbins recalled. "We could order our templates, triangles and rulers from the government. But everything had to strictly follow REA guidelines."

During the 1968-1971 period, all signage on Hoosier Energy property, including substations and vehicles, reflected the government ownership. Few employees, however, gave the ownership issue much thought. "Our paychecks still said Hoosier Energy on them," said Virgil Peterson.

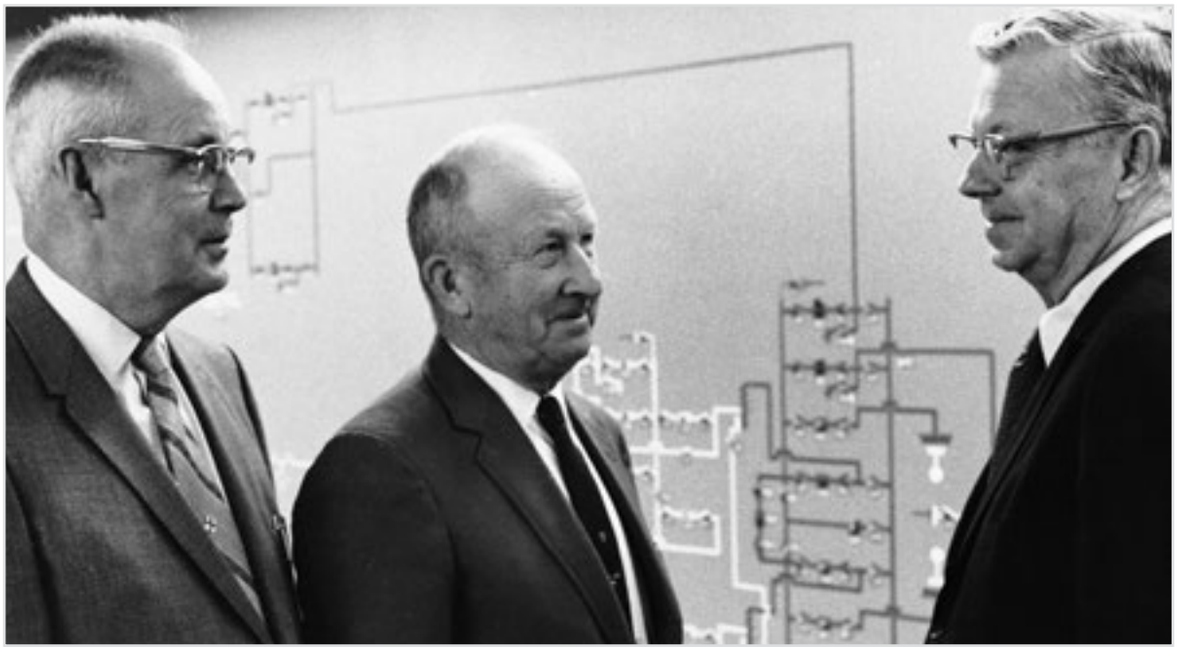
Frank Ratts removes the federal government sign from the cooperative's facilities, replacing it with a company sign. Nearly 10 years after Hoosier Energy obtained its first REA loan, the co-op officially ceased to be an agent of the federal government.

Hoosier Energy's workforce was more interested in getting the Petersburg station on line than in ownership issues.

Hoosier Energy's high-voltage transmission system was built to REA and Tennessee Valley Authority engineering standards, which made the initial supply of power in 1971 from Petersburg to the TVA a straightforward procedure.

Big Rivers Electric Cooperative, located across the Ohio River in Kentucky, contracted with Hoosier Energy for a block of industrial power for Southwire Aluminum, one of its major industrial customers. Big Rivers had experienced difficulty getting all the power it needed during an electricity shortage on the TVA system.

A more formidable task for Hoosier Energy in the early 1970s was building and converting more than a hundred substations to deliver power to its member cooperatives.



Dewey Barnett, Walter Underwood and Frank Ratts were the driving forces behind getting the Ratts Station permitted and built. Underwood was one of Hoosier Energy's original board members.

Hoosier Energy's office staff gather for a group photo in the early 1970s.

As part of the 1971 interconnection agreement, Hoosier Energy purchased 50 substations from PSI. Each had to be modified because of design differences.

Darrell Goodson, a Linton native who joined Hoosier Energy as the cooperative's first meter technician in September 1971, spent most of his first six months on the job on the conversion project.

"We had to pull all the meters and change them," Goodson explained.

Hoosier Energy board member Willard Kuhn of Shelby County REMC was a tireless promoter of the power supply cooperative.

Goodson and an operations crew averaged two substations a day. The crew officially reported to the Bloomington headquarters, although Goodson recalled that he and his co-workers were "in the field 100 percent of the time. We did a lot of travelling those first few months, from state line to state line and to the Ohio River."

By 1973, Hoosier Energy crews and contractors converted or built nearly 140 substations in southern Indiana, and most member cooperatives were receiving at least some of their power from the Petersburg station.

Even after the substation project was complete, Johnson County REMC and Morgan County REMC, in the northern part of the Hoosier Energy service area, were still receiving much of their power from PSI, largely because of interconnection agreement stipulations.

In 1973, Hoosier Energy's revenues totaled $14.3 million from energy sales to members of 1.3 billion kilowatt-hours. The Petersburg station had generated nearly 1.6 billion kilowatt-hours during the year and had consumed 700,000 tons of coal. The electric power delivered to members in 1973 dwarfed the entire consumption of all Indiana electric cooperatives just a decade before.

THE MEROM STATION

For the utility industry, 1973 was a watershed year. Several factors that had been brewing came together that year, factors that would make utility generation and

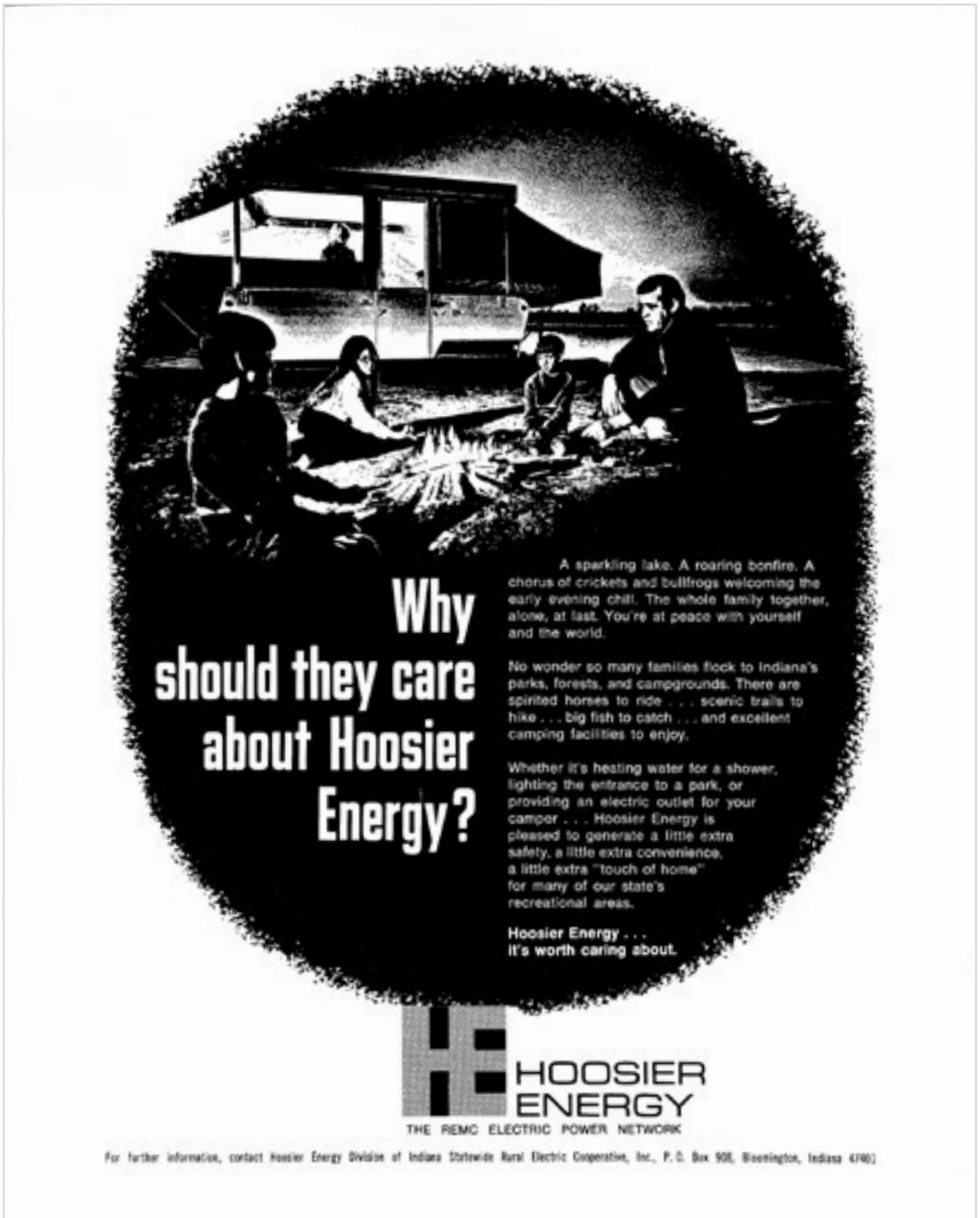
transmission planning an increasingly more complex and risky process than in the past.

The first factor arose overseas. The Arab-Israeli war in October 1973 precipitated a global energy crisis when the Organization of Petroleum Exporting Countries (OPEC) instituted an oil embargo against the U.S. and other countries supporting Israel. Soon there was upward price pressure on all forms of energy.

Electric utilities on both coasts could no longer rely on inexpensive oil to fuel boilers at their generating stations. Although Hoosier Energy Chairman Dewey Barnett pointed out in 1974 that Hoosier Energy was "fortunate to be in a geographic sector that has abundant coal reserves," the reality was that the Arab oil embargo ratcheted up the price of all forms of energy, including coal.

General Manager Frank Ratts reported to the board that Hoosier Energy's expenses had jumped 23 percent in 1973, "due in large part to the soaring cost of fuel." Only the proximity of the Petersburg station to its coal supply prevented the cost of fuel

The Ratts Station utilized the abundant coal resources of southwestern Indiana. The conveyor in the foreground carries coal from the Solar Sources wash plant to the station.



Hoosier Energy promoted environmental awareness in 1968, long before environmentalism became a watchword in American society.

from going even higher.

The second factor, tied to the first, was inflationary pressures in the U.S. economy that would plague the nation for most of the 1970s and early 1980s.

Hidden in the cost of coal for electric generation was a third factor that would drive up the cost of electricity for most of the next decade. The U.S. had become more environmentally conscious in the early 1970s. The first Earth Day had been held in April 1970, and across the country environmentalists began demonstrating for tough, new air quality standards.

State and federal agencies responded with regulations placing stringent, new pollution control standards. An immediate result for Hoosier Energy was the necessity to install electrostatic precipitators at the Petersburg plant to reduce particulate matter.

The three factors that came together in 1973 conspired to create unprecedented pressures on electric utilities across America for the remainder of the decade. But a fourth factor that came into play in the 1970s created an urgent need for utilities like Hoosier Energy to plan generating capacity for its system. Electricity demand was continuing to climb.

With the Ratts Station in commercial operation, Hoosier Energy had to meet rapidly increasing growth during the early 1970s. Virgil Peterson, Frank Ratts and Keith Thurston, manager of Shelby County REMC (center), discuss load issues in 1974.

Frank Ratts put the issue into perspective in Hoosier Energy's 1973 annual report. "It is staggering to note the increasing demand for electricity in the past several years," Ratts wrote. "It's almost overwhelming to project that demand for the years to come. The electric output in the United States today is more than 1,850 billion kilowatt-hours — nearly seven times more than it was 25 years ago. In the 1950s and

1960s, the generating capacity in the United States doubled. It will have to double again in the 1970s to keep pace with demand."

For Hoosier Energy, the demand curve kept trending sharply upward. Peak demand rose 10 percent in 1973, 12 percent in 1974 and 16 percent in 1975. At that rate, the cooperative's load would double in less than five years. Clearly, something had to be done if Hoosier Energy and its members wanted to once again avoid finding themselves at the mercy of other utilities for power supply.

Hoosier Energy had, in fact, begun consideration of adding generating capacity almost as soon as the Petersburg station went into commercial operation. "Frank and I had discussions about it" as early as 1972, Virgil Peterson recalled.

The G&T's attorneys interpreted the 1971 interconnection agreement to mean that the cooperative would have to at least consult with PSI and Southern Indiana Gas & Electric before embarking upon a project to build additional capacity. Ratts did talk to his counterparts at the two investor-owned utilities on several occasions in 1972 and 1973, but for the most part, the discussions fell on deaf ears.

In 1980, Indiana Governor Otis R. Bowen signed legislation that enabled Hoosier Energy to separate from Indiana Statewide.

After an extensive search, Hoosier Energy zeroed in on the small community of Merom for its next baseload generating station. Virgil Peterson (left) briefs Merom and Sullivan County officials on the site selection process in 1975.

Dewey Barnett (left) and Virgil Peterson wield shovels at the Merom Station groundbreaking in 1977.

A 1980 aerial view of the Merom plant construction gives perspective of the magnitude of the project. The intake canal from the reservoir is under construction at left.

Construction crews built a cofferdam on the Wabash River as part of the construction of the Merom Station's cooling system.

PSI was eager to have Hoosier Energy join in construction of its Marble Hill nuclear station on the Ohio River near Madison. “We got a hard sell on that,” Peterson recalled, but Hoosier Energy’s board opted to not proceed with the nuclear project. PSI eventually convinced Wabash Valley Power Association, the state’s other G&T, to become a partner in the Marble Hill project. As a result, the Plainfield utility’s opposition to Hoosier Energy’s plans for building new generation faded.

Hoosier Energy approached Southern Indiana Gas & Electric about becoming a partner in a coal-fired power plant that the Evansville utility was planning. There was mutual interest, and in 1974 Hoosier Energy began discussions with the REA about securing loans for a jointly owned facility.

“Then we hit a roadblock,” Peterson said, explaining that state and federal pollution control regulations would have required the partners “to go back to first base on environmental studies. That would have added millions to our costs.”

Faced with continuing increases in peak demand, the G&T’s board of directors elected to go it alone. In 1975, Hoosier Energy purchased a site in west-central Indiana in Sullivan County and announced plans to build a 980,000-kilowatt generating station fueled by Indiana coal. Estimates of the capital investment for the project were more than four times what it had cost to build the Petersburg station and the transmission system.

Frank Ratts had retired in December 1974. For much of a quarter-century, Ratts had worn two hats, as general manager both of Southeastern Indiana REMC and Hoosier Energy. Ratts’ dedication to the cooperative movement, his ability to “push the envelope” with investor-owned utility neighbors and his unflagging optimism about the future of southern Indiana created a lasting power supply legacy.

FRANK RATTS

Frank Ratts' dedication to building a power supply for the rural electric cooperatives of central and southern Indiana was recognized by Hoosier Energy. The board of directors voted to name the power plant near Petersburg that Ratts had fought to build for more than a decade in his honor.

Ratts spent nearly a quarter-century of his life with Hoosier Energy. Born and raised in the southern Indiana community of Salem, Ratts attended college in North Carolina and returned to Indiana during the Great Depression to work in his father's grocery store. In 1936, he started doing house wiring for farmers getting electricity from the newly organized Bartholomew County REMC. He joined the Columbus-based distribution cooperative shortly after, and by 1939 was manager of Bartholomew County REMC.

In 1941, the then 34-year-old Ratts was named general manager at Southeastern Indiana REMC in Osgood. From 1949 to 1964, Ratts wore two hats, as the general manager of the distribution cooperative and as a driving force behind Hoosier Energy. For most of his rural electric cooperative career, Ratts focused his efforts in the wholesale power area for Indiana's distribution cooperatives.

In early 1965, Hoosier Energy asked Ratts to become the power supply cooperative's first full-time manager. Hoosier Energy had received REA loan approval to build the Petersburg plant and associated transmission system and needed a full-time manager with drive and determination.

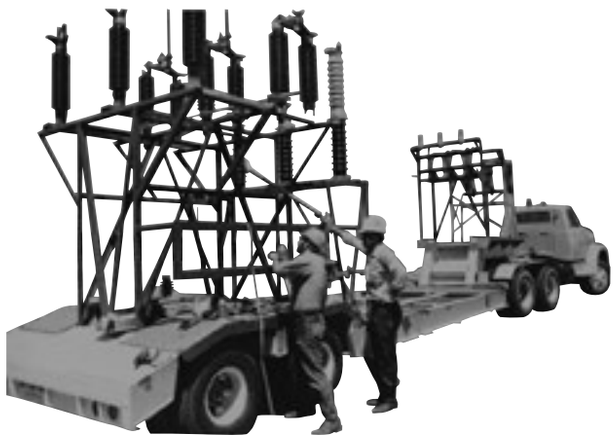
Ratts said years later that the legal battles from 1965 to 1970 to get the Petersburg plant into commercial operation were a test for the vitality of the cooperative movement in the state. Ratts retired in 1974 following 38 years in the Indiana rural electric program. He died in 1994 at his Bloomington residence at the age of 87.

Frank Ratts became Hoosier Energy's first full-time manager in 1965.

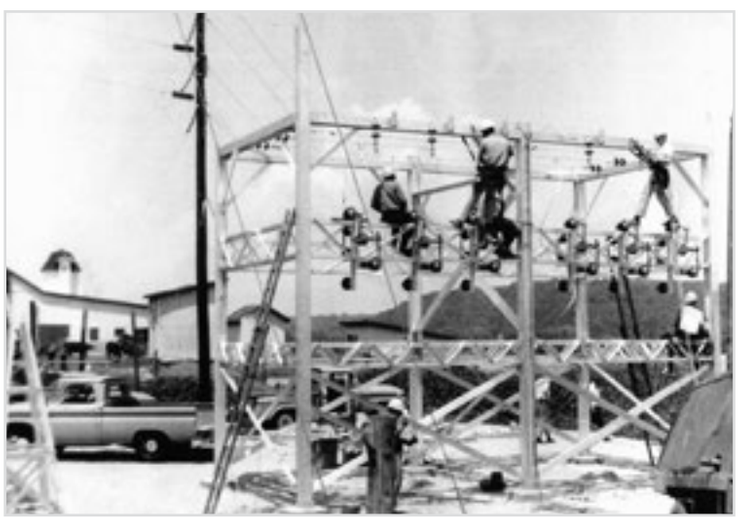
CHAPTER SIX

POWER THROUGH TEAMWORK

Construction of the Merom Generating Station in Sullivan County, Indiana, began in the fall of 1977, two years after Hoosier Energy announced plans for the 980,000-kilowatt, coal-fired generating plant. In many ways, the world of electric utility economics had begun to change in this post-energy crisis era.



The time that elapsed between the announcement of Merom and the beginning of construction was in itself a sign of the increasing complexity of power plant projects. While the Petersburg plant had been held up for years by legal and regulatory issues, the Merom plant would be built on a timetable dictated by environmental and financial considerations.



Hoosier Energy crews built and converted hundreds of substations in the 1970s.

Before construction could begin, the cooperative had to obtain approval of PSI and Southern Indiana Gas &

Electric. Under terms of the 1971 interconnection agreement, Hoosier Energy and its two neighboring investor-owned utilities had to come to an agreement about new generating capacity for the cooperative.

For the most part, the rancor among the three utilities had lessened. Virgil Peterson, who in 1975 had succeeded Frank Ratts as general manager of the generation and transmission cooperative, moved quickly to establish more cordial relations with Al Barker, Chief Executive Officer of PSI, and D.W. Vaughn, his counterpart at Southern Indiana Gas & Electric.

"We started meeting with them," said Peterson. "They'd attend Indiana University football and basketball games and then come over to the office after the game. It enabled us to talk openly about the interconnection agreement and new issues."

Barker was insistent about avoiding duplication of transmission facilities and related investments, and Hoosier Energy's Board of Directors had not ruled out building new generating facilities in a joint project. Through the summer of 1975, Hoosier Energy studied the feasibility of joining Southern Indiana Gas & Electric in the construction and operation of the Evansville utility's A.B. Brown plant in southwestern Indiana. The joint-venture considerations were evidence that PSI, Southern Indiana Gas & Electric and Hoosier Energy were putting the battles of the past behind them.

Hoosier Energy announced a coal transportation agreement with the Illinois Central Gulf Railroad in Bloomington in preparation for the Merom Station start-up.

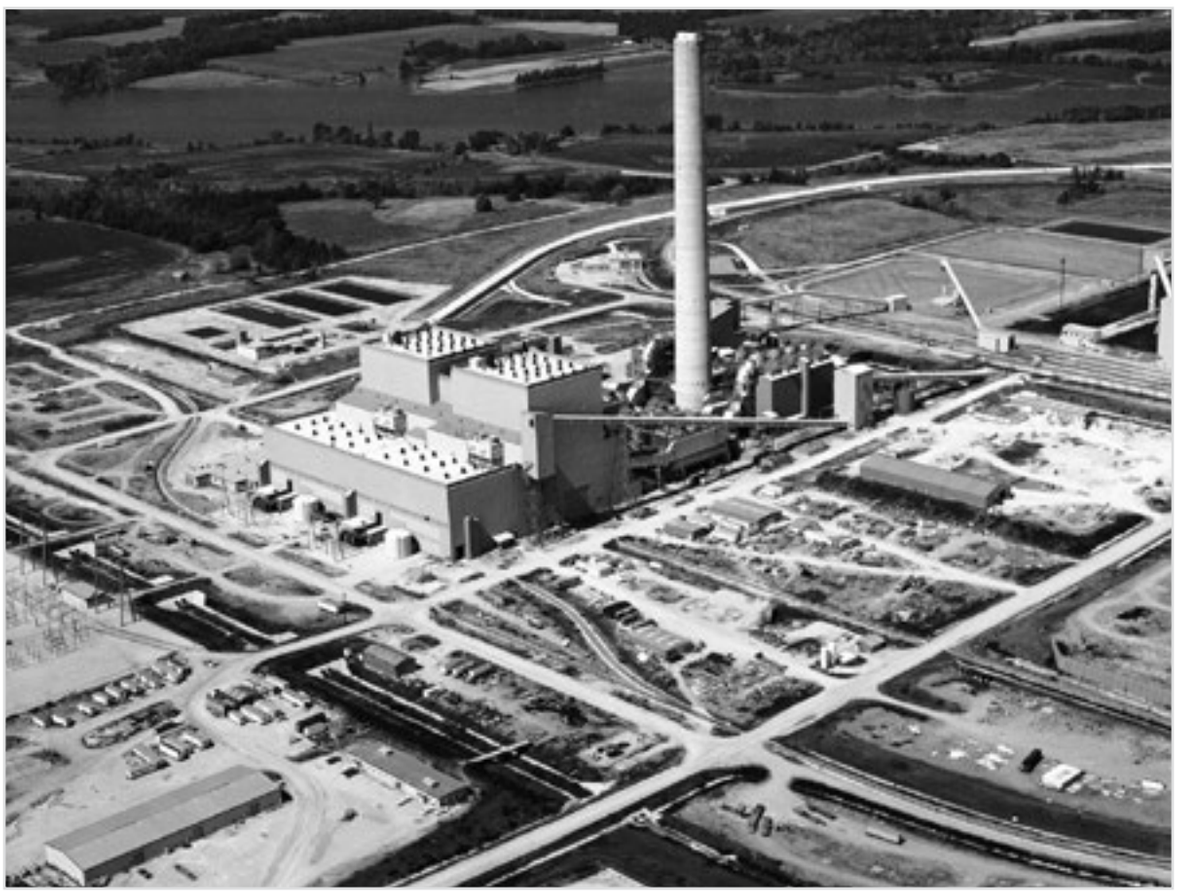
In November 1975, the three utilities signed a memorandum of intent, which was the first step in opening the way for the construction of the Merom plant. The resulting joint operating committee

set up under the terms of the memorandum was a major step in coordinating planning for new generating and transmission facilities.

"That was very important," Peterson said. "That joint operating committee helped avoid duplication of facilities for years to come. It saved all three companies money."

NEW HURDLES

With fences mending, Hoosier Energy moved ahead in 1977 to transform the Merom plant from drawing board to steel and concrete. Before construction could begin, three important hurdles had to be cleared. First, financing for the plant and associated transmission system had to be in place. Then, a comprehensive environmental impact statement for the plant and site had to be filed. Hoosier Energy also would negotiate coal



The Merom Station more than quadrupled Hoosier Energy's capacity in the early 1980s. Over the course of several months, the power plant's workforce grew to more than 200 employees.

contracts for the more than 2 million tons of coal the Merom plant would burn each year.

President Richard M. Nixon tightened up REA loan requirements in 1972. More importantly, the REA had changed loan capitalization requirements. After 1972, power supply cooperatives like Hoosier Energy could borrow only up to 20 percent of total funding needed for a project directly from REA. REA provided loan guarantees for the balance, which would come from private market sources.

In 1975, Hoosier Energy hired R.W. Beck, a Seattle-based utility consulting engineering firm that worked with many public power entities in the U.S., to conduct environmental studies at the Merom site. The end result was a more than 500-page Environmental Impact Statement that was submitted to REA in 1977.

Approval of the Environmental Impact Statement gave one key go-ahead for the Merom project. But it also symbolized a new fact of life for electric utilities scrambling to keep up with demand. The cost of building the Merom plant to new environmental

Hoosier Energy-sponsored tours of the Merom Station introduced the power plant to hundreds of distribution cooperative consumers in the mid-1980s.

standards, which required construction of a 1,500-acre lake and adding scrubbers to remove sulfur dioxide from Indiana coal, would add more than $180 million to the cost of the project.

Before it would grant the Merom construction, the REA wanted the cooperative to sign long-term coal supply contracts. Sullivan County and much of Southwestern Indiana was dotted with dozens of coal mines.

Yet, when planning for the generating station in early 1975, the cooperative had a difficult time getting commitments from major coal mining companies.

In 1976, Hoosier Energy signed long-term contracts with Amax and Freeman-United Coal Co., two major producers. The cooperative also signed coal supply contracts with Solar Sources, an Indianapolis company that Hoosier Energy had helped get started in business in 1971 to supply coal to the Ratts Station.

On November 2, 1977, Hoosier Energy received a long-awaited $722 million

The August 8, 1983, dedication of the Merom Station was attended by hundreds of central and southern Indiana electric cooperative directors, employees and public officials.

loan guarantee for the Merom project from the REA. The next day, Willard Kuhn, the cooperative's chairman, led a Hoosier Energy delegation to Sullivan County to break ground for the plant. Before the day was out, workers employed by United Engineers & Constructors, the Philadelphia-based design and construction management firm, swarmed onto the site. Meanwhile, demand from member systems had continued to spiral higher in the mid-1970s at nearly 10 percent a year.

Chairman Willard Kuhn had spent half a lifetime in rural electrification with Shelby County REMC. Kuhn noted early in 1978 that "the challenges have changed significantly since the days when rural electric cooperatives 'first turned on the lights in the country.' But the dedication, the perseverance and the spirit necessary to overcoming these challenges all have remained the same."

Kuhn urged Hoosier Energy and its members to "look ahead to the challenges of the future but do not forget past lessons. That adversity is the test of strong men. That there is power through teamwork. And that out of great endeavors come great rewards."

OPPOSITION AND SUCCESS

There were 33 primary contracts for the Merom project that created construction employment of more than 1,200 workers initially and up to 2,000 workers at peak times. For many of those workers, the first order of business was moving earth to create the 1,500-acre Turtle Creek Reservoir, the cooling lake for the plant.

There was horrendous weather following the groundbreaking including the Blizzard of 1978 and the wettest spring on record. Weather had put the schedule behind the eight ball.

When Hoosier Energy began construction of the Merom plant in 1977, a small group of local landowners opposed the project. The cooperative assembled some 5,000 acres of land to build the plant and associated reservoir. That helped fuel opposition at a time when family farmers nationwide were concerned about losing agricultural land to industrial development.

Within months of formally announcing plans for the plant, Hoosier Energy found itself the target of Citizens Opposed to Generating Stations (COGS). Founded by a

Congressman John Myers, a Terre Haute Republican, was the keynote speaker at the Merom Station dedication.

mechanical engineer from nearby New Lebanon, COGS opposed the Merom plant for a number of reasons. The primary objection was the amount of prime farmland that was to be taken out of production for construction of the plant. But the group also raised questions about the project's environmental impact statement and the effect an influx of construction workers would have on the small community.

COGS opposition solidified into a lawsuit which was eventually settled. For its part, Hoosier Energy noted that the Merom construction project was handled with a measure of fairness for landowners that was over and above what the law required.

"Many of the landowners were extremely

Congressman John Myers (left), Virgil Peterson (center) and Indiana Secretary of State Edwin Simcox cut the ribbon to dedicate the Merom Station in the summer of 1983.

A giant dragline operates at the Amax Coal Company's Chinook Mine in western Indiana in 1985. The Chinook Mine would be a major supplier of coal to the Merom Station.

cooperative," recalled Virgil Peterson. "We used a local agent to buy land. We tried to be fair and aboveboard in all of our dealings. It was a very tough period for farmers. They were trying to cope with an unprecedented increase in land prices."

The COGS lawsuit spawned a 13-day hearing by the Indiana Environmental Management Board, a hearing which gave Hoosier Energy the green light to proceed with construction. The cooperative did have many local proponents. Merom Mayor George Gawling was helpful and cooperative and George Gettinger, then director of the Wabash Valley Interstate Commission in Terre Haute, went on record supporting the Merom project. Gettinger pointed out that the plant would help attract jobs and industry to Sullivan County, as well as stimulate plans to make the Wabash River a navigable waterway, one of the commission's goals. Local support was demonstrated through a parade and rally.

As it was, the COGS opposition was but a glitch. The economic benefits that the Merom plant brought to Sullivan County eventually won over all but the most die-hard opponents. But Hoosier Energy would face more difficulties completing the plant. The reason was an economic climate in the early 1980s that dramatically changed the rules for the electric power industry.

"IT WAS ALL THAT WE COULD DO TO GET THAT PLANT BUILT"

In early 1980, Hoosier Energy passed the halfway mark of Merom project construction. The U.S. economy, which had been struggling since the first energy crisis in 1973, was worsening. The fall of the Shah of Iran in 1979 had precipitated a second energy crisis. The shortages of foreign oil caused inflation — already high through much of the 1970s — to spiral even higher. Interest rates, which were critical to utilities borrowing money to build power plants, reached 20th century record levels.

"Inflation was running 13 percent a year," Peterson said. "Interest rates were at 21 percent. We had some flexibility on our construction loan interest rates, but construction was draining our resources. It was all we could do to get that plant built."

Hoosier Energy had company. Utilities across the nation were struggling to complete

A welder fixes a break in one of the turbines at Ratts during outage maintenance.

construction projects that had been necessitated by the surge in energy demand of the 1970s. Nuclear utilities were in particular trouble. The March 1979 incident at Three Mile Island near Harrisburg, Pennsylvania, ushered in new safety requirements for construction and operation of nuclear plants that — coupled with skyrocketing interest rates — drove many nuclear construction projects to the brink of bankruptcy.

Wabash Valley Power Association, the state's other generation and transmission cooperative, had purchased a 17 percent joint venture interest in Public Service Indiana's Marble Hill nuclear plant in 1978. Six years later, with the plant nearly $1 billion over cost and years from commercial operation, PSI abandoned Marble Hill. Wabash Valley's $500 million investment in the plant would never be recouped.

Double-digit inflation and interest rates forced electric utilities to raise rates to consumers. But as electric rates ratcheted upward, electricity demand dropped as consumers began practicing energy conservation. "Immediately after the construction of Merom started," Virgil Peterson explained, "we hit a period of low electric demand. The economy just went into the dumps."

Electric power demand, which had been growing at a rate of 8 to 10 percent a year during the early 1970s, dropped to a 2 percent annual growth rate by decade's end. Almost overnight, Hoosier Energy and most of the rest of the nation's electric utilities had to adapt to a sharply changing electric consumer marketplace.

Left with more capacity than planned, selling power from the Merom Station would

be a far more important proposition. The Merom Station went into commercial operation in 1982 and 1983. Construction costs for the power plant project reached $850 million. As evidence of a new emphasis on environmental issues, Hoosier Energy spent more on pollution control equipment — including $180 million for air and water quality systems — for the new plant than it had spent on the entire Ratts Generating Station two decades earlier.

Lessening the impact on rates of this investment would require some of the most innovative efforts in the electric utility industry.

By 1982, structural steel was well on its way to topping out at the Merom Station's first unit. But demand for power had already begun to slip in Indiana and the U.S., and Hoosier Energy would be faced with the challenge of marketing surplus power from the plant.

THE TOWN OF MEROM

The western Indiana town of Merom is a quiet community with a proud tradition dating back more than 150 years. The town sits at the summit of the Merom Bluff, a geological landmark that juts above the Wabash River and the bottom lands of Illinois. In the late 19th century, the town was a stopping place for the paddle wheelers and barges that plied the Wabash River. A ferry crossed the river at the base of the bluffs, providing a vital link for travellers journeying to and from neighboring Illinois. Today, the ferry no longer operates.

From 1859 to 1924, the town of Merom was home to Union Christian College, a liberal arts institution that educated the children of members of the Christian Church. Following the joining of the Christian Church and the Congregational Church in the 1930s, church leaders in 1936 re-opened Union Christian College as the Merom Institute. Since that time, the Merom Institute has continued to serve the Indiana-Kentucky Conference and the Illinois Conference of the United Church of Christ.

Constructed in the 1800s, the Merom Institute serves the United Church of Christ.

CHAPTER SEVEN

PEOPLE DELIVER THE POWER

Years before construction workers began descending onto the Merom plant site, Hoosier Energy employees were generating electricity at the Ratts Station and operating an expansive transmission system. They were charged with delivering electric power efficiently and reliably to member systems.

Keeping a high-voltage transmission network operating at optimum efficiency and reliability is a major effort. Line crews and contractors were busy each year clearing the system's pathways. With southern Indiana's long growing season, untold hours were devoted to mowing, cutting and spraying along rights-of-way.

Line crews also performed maintenance tasks as they kept the system operating. In any given year in the 1970s, hundreds of glass insulators had to be replaced with a porcelain type. When contractors were building the lines, there was a nationwide shortage of porcelain insulators, necessitating the use of glass type insulators.

Mike Spinks, Hoosier Energy's transmission system manager in the 1980s, and a line crew member in the 1970s, replaced his share of insulators. He said that during the years Hoosier Energy was an agent for the U.S. government, the FBI could have been called in to investigate the rash of insulator shootings.

Building substations kept Hoosier Energy crews busy during the 1960s and 1970s. Ervin Blish, manager of engineering services, and Tom Gibbs, chief of substation engineering, discuss a switchover at Knox County REMC's Algiers substation in the 1960s.

And then there were the woodpeckers. Nearly all of Hoosier Energy's transmission system is suspended from Douglas fir and southern pine poles that soar as high as 120 feet. Some cross-arms on H-frame structures are 54 feet across. "There're more woodpeckers than I could imagine in southern Indiana," said Spinks. Woodpeckers of every size and species poked holes in the wooden poles looking for grubs and insects. Over the years, woodpecker damage created a major maintenance problem.

Crews wrapped poles in hardware cloth and black plastic wrap. They stapled wire mesh around the poles. When contractors built the 345,000-volt transmission line from the Merom Station to the Bloomington primary substation, salt-treated poles that hardened and turned green were used.

EVERYONE KNEW EVERYONE

Before the Merom Generating Station began operation in the early 1980s, most line workers at Hoosier Energy had been on the job for about a decade. Everyone knew everyone and employees felt like part of a big family.

"It was a bunch of dedicated employees who exemplified the cooperative spirit," explained Spinks. "At Hoosier Energy, everybody knew you."

"There weren't really that many employees," Dennis Robbins, a 25-year veteran of the line and substation design department, described Hoosier Energy's workforce in the early 1970s. "You knew everyone by their first name."

Hoosier Energy crews had a close working relationship with their counterparts at member systems. The G&T's crews built the substations, placed them in service and operated the transmission side of the facility. The distribution cooperatives operated the low side.

"We were working closely with the local cooperative people," explained Darrell Goodson, who became manager of the system control center at Bloomington in 1991. "Hoosier was a small organization in those days, and we worked very closely with the guys from the cooperatives."

Don McFarland, Hoosier Energy's general line superintendent in the 1970s, was a taciturn South Dakotan, who set hard and fast deadlines for projects, but co-workers remember him as being fair. Murray Wills, another early line superintendent, was from the old school. Wills knew every back road in southern Indiana, and veterans still recall him standing out on a job site overseeing a project in rain, sleet or snow, an ever-

During the 1970s, Hoosier Energy's drafting and design department worked on a host of transmission and substation projects.

Hoosier Energy employees (from left) Bob Risley, Dick Malcolm, Jim Ridgley, Flo Phillips, Paul Mouser, Bob Lehman and Jewell Malone smile for the camera during an employee recognition ceremony in 1979.

present cigarette hanging out of his mouth.

George Weaver worked what sometimes seemed to be 24-hour days building the company's microwave-based communications system in the early 1970s. Herb Dukes, who had been brought aboard by Frank Ratts to serve as Hoosier Energy's procurement manager, endeared himself to the cooperative's line crews for holding vendors to their promises. "He believed in making the salesman walk the talk," Spinks described Dukes' philosophy. "He was a procurement officer for General Patton during World War II."

Ed Farkas was a Hungarian refugee who came to the U.S. following the 1956 revolution in Hungary. During much of the 1970s, he served as a surveyor for Hoosier Energy. Dennis Robbins recalled accompanying Farkas to a site where a contractor was building a transmission line.

"They were using dynamite to blast holes," Robbins said. "The contractor said, 'You'd better get under the truck.' Ed said, 'You'd better listen to him.' We got under the truck, and when the blast went off, it pelted the truck with rock and debris. Ed had kind of a dry sense of humor about that type of thing."

A BIG FLASH IN THE SKY

Until the 1980s, line maintenance was low-tech and labor-intensive. James Boyd moved to Indiana in the mid-1960s with Irby, the Mississippi-based company that built the first phase of Hoosier Energy's transmission system. Boyd joined Hoosier Energy

in 1968 and spent much of the 1970s building substations out of pole yards at Petersburg and Worthington. At first, crews worked from a one-ton utility truck, setting replacement poles with an A-frame mounted to the bed. Then they took possession of a digger-derrick.

Ron Berg recalled using Hoosier Energy's first bucket truck. Before that time, utility line workers had to use ladders or climbing equipment to reach trouble overhead. For the power supplier's crews, the advent of hydraulic equipment in the 1970s meant a lessening of some of the hazards and draining labor associated with line maintenance.

But another reality of transmission maintenance in early years was distance and time. Hoosier Energy's transmission lines criss-crossed 47 counties and ran from Petersburg in southwestern Indiana to Napoleon in southeastern Indiana, some 150 miles. Ron Berg would leave Bloomington at seven in the morning, pulling a Lo-Boy trailer

Hoosier Energy's office services staff in 1979 was composed of (from left) Sandy McClary, Rose Easton, Debbie Davis, Diane Callahan and Shirley Calvert.

Bloomington office workers Hilda Hunsberger, Judy Hartung, Shirley Calvert, Joanne Rickey, Marge Elsey, Jan McCawley, Sharon Inman and Jody Lafferty pose for the photographer at a company Christmas party in 1970.

Hoosier Energy line specialists have long maintained the cooperative's transmission system. Bill Dunn and Howard Goss perform hot stick work on a transmission line in the mid-1980s.

with equipment. More often than not, it would be evening before he arrived back at the garage in Bloomington. "You worked until you got it done," Berg said.

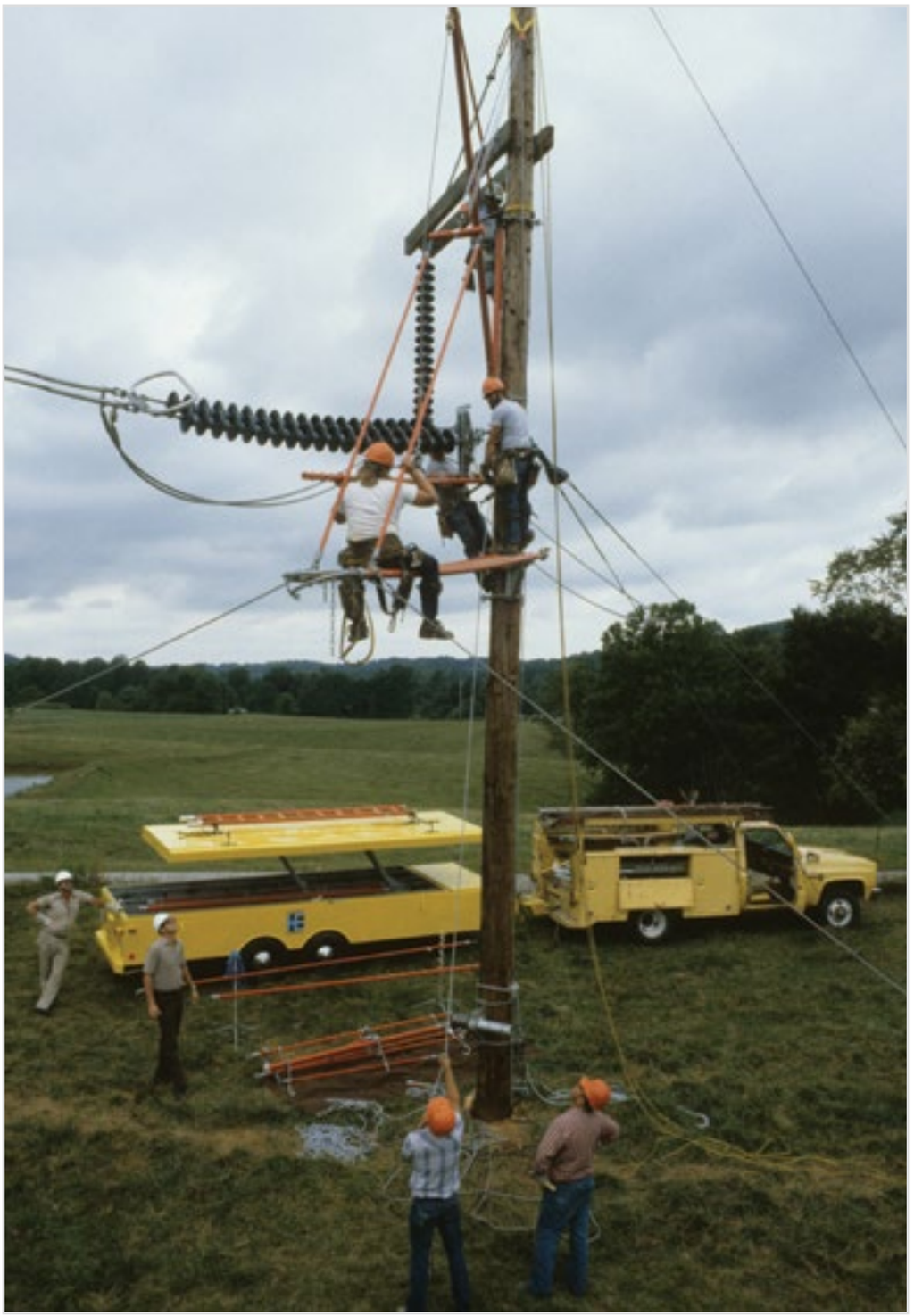
Perhaps the most difficult task facing line crews was restoring power following windstorms, lightning strikes or ice storms. There was precious little automation at the time, and service restoration was a trial and error process.

The power supplier's 161,000-volt transmission backbone ran from Taswell to Napoleon. It was 100 miles long and the only east-west transmission line across the state. The Irby Company had built the line as straight as possible, and that meant that it didn't always follow the zigzag roads of southern Indiana.

When there was a fault in that line, crews had to open a switch at Bedford and close the breaker at Taswell. If that didn't work, they'd repeat the process on another pair of switches.

Darrell Goodson remembered his initial fascination with the method of locating outages in the 1970s. "You'd open the middle of the line up and position people at either end," he said. "Then you'd look for the night sky to light up."

James Boyd recalled being one of the people assigned to spot a fault. "At night," he said, "you couldn't see a lot from the road. You'd sit on the roadway, they'd try the line, and you'd look for a big flash in the sky. It looked like a huge lightning bolt."



Hoosier Energy line crews string conductors on a transmission line in 1980. The Lo-Boy trailer that Ron Berg pulled to job sites every morning in the 1970s is parked in the background.

The automation of transmission systems in the late 1980s made the trial and error process a thing of fond memories. Locating the cause of outages is much more precise thanks to distance fault recorders on lines.

"Now, whenever a line trips," explained Darrell Goodson, "we know within a minute where the fault is, and we can locate it within a mile. We direct crews right to the appropriate switches and get it picked up as quickly as possible."

Southern Indiana is cave and coal country, and Hoosier Energy crews have been called upon to replace poles in unusual circumstances. In the early 1980s, a 345,000-volt line sagged and tripped off line when one wood tower structure collapsed into an underground coal mine shaft at an abandoned mine near Dugger.

At about the same time, Hoosier Energy crews were building the Ramsey primary line north of Corydon. The area is honeycombed with limestone caves, and crews discovered some of the tower structures were planned for placement directly atop underground caves, requiring rerouting of lines.

Christie Waterford (right) and Richie Whitman use a special device to measure cable stored on spools during Hoosier Energy's annual physical inventory in October 1978.

During the 1990s, new segments of the transmission system were built each year to better serve members and meet the region's increasing electricity needs.

Like most utilities that operate high-voltage transmission systems, Hoosier Energy relies on aerial inspection of its lines to identify areas in need of maintenance and repair. But there is no substitute for up-close and personal visual inspection. Since 1978, Hoosier Energy has carried on a comprehensive line inspection

program. Crews equipped with walkie-talkies have walked every mile of the system looking for damage. “We’d walk the whole system every five years,” said Spinks. “Every few miles, the guy walking would trade off with the guy in the truck.”

When the Merom Station began producing power in 1982, Hoosier Energy’s transmission network was in place and ready to meet the needs of member distribution cooperatives. Line crews had more than 15 years of experience maintaining and operating the system. During that period, they had developed a work ethic and cooperative spirit that would serve the G&T and its members well in the years ahead.

With two power plants and a transmission system in place and operating, Hoosier Energy would now begin addressing two critical issues. The cooperative had to develop plans to recover costs of the Merom Station while keeping rates competitive, and meet the challenges of providing electricity for increasing residential, commercial and industrial loads.

The 1980s marked the computerization of power plant control systems. Here, control room crews at the Merom Station exchange information during a shift change briefing in 1984.

VIRGIL PETERSON

Virgil Peterson's electric cooperative career covers the spectrum of distribution, generation and transmission cooperatives and spans 44 years, nearly half at the helm of Hoosier Energy.

Born in 1930 in Enderlin, North Dakota, Peterson grew up in the nearby towns of Oakes and Hankinson. Following graduation from high school, he attended the North Dakota School of Science in Wahpeton and went to work for Cass County Electric Cooperative — the largest rural electric cooperative in North Dakota — at its Kindred office in 1949.

Peterson worked for Cass County for 16 years, eventually becoming office manager and later transferring to the cooperative's West Fargo office.

Named as Hoosier Energy's president and chief executive officer in 1975, Virgil Peterson worked with the power supplier's employees to fashion innovative safe-harbor leases and negotiated a 400-megawatt bulk power sale that considerably lessened the impact of rate increases on the G&T's member co-ops.

In 1965, Peterson applied for an office manager position with Hoosier Energy. The cooperative had just moved to its new offices in Bloomington, and Frank Ratts needed an electric cooperative veteran to administer the growing paperwork and added responsibilities generated by the power supply cooperative.

Peterson was the fifth person hired by Ratts. During the next nine years, the native North Dakotan wore many hats, working closely with Ratts and the management team to firm up loans for the Petersburg power plant and associated transmission system and helping prepare for the succession of lawsuits over the Ratts plant.

When Frank Ratts retired in 1974, Hoosier Energy's board of directors named Peterson president and chief executive officer of the power supply cooperative. Peterson served in that office for the next 19 years, guiding Hoosier Energy through the planning, construction and financing of the Merom Station and the bulk power sales of the mid-1980s.

Virgil Peterson retired from Hoosier Energy in 1994.

CHAPTER EIGHT

MAKING LIFE BETTER

The early 1980s were difficult years for America's electric utility industry. Utilities brought new generating plants on line at costs that were two and three times that of 1970s power plant projects. This new generation of costly power plants was to be paid for through higher rates to consumers, which spawned both protests from ratepayers and growing energy conservation.

At Hoosier Energy, the Merom Generating Station went into commercial operation in 1982 at a cost of $850 a kilowatt, four times the cost of the Ratts Station. Hoosier Energy summed up the circumstances it faced in early 1984 when it published its annual report and designated the year just past, "Persevering in 1983."

Hoosier Energy's headquarters office building on State Road 37 north of Bloomington housed most of the cooperative's executive and administrative staff in the late 1980s.

After small rate increases to members in 1976 and 1977 relating to construction work in progress at the Merom project, Hoosier Energy continued to feel pressure

Dave Stolz helped manage bulk power transactions to other utilities.

to increase rates. Beginning in 1980, wholesale rates to its members nearly doubled during the next seven years, peaking in 1987.

Rate increases were common for power supply cooperatives attempting to pay for new coal-fired generating stations. At distribution cooperatives too, rate increases were part of doing business. By 1978, more than 300 electric cooperatives across the country were requesting from regulators approval to pass along higher wholesale costs.

For some generation and transmission cooperatives, the early 1980s were bleaker because of nuclear power plant construction programs. In 1979, generation and transmission cooperatives in 26 states were partners with investor-owned utilities in joint venture nuclear projects. The nuclear incident at the Three Mile Island plant in Pennsylvania, in March 1979, resulted in tough new regulations, construction delays and higher costs for nuclear power plants under construction.

With prime borrowing rates approaching 20 percent and inflation still soaring at the end of the 1970s, construction costs rose drastically for both nuclear and coal-fired power plants. To control costs, Hoosier Energy cut spending, began marketing bulk power to other utilities and crafted innovative financing arrangements.

INNOVATIVE FINANCIAL TRANSACTIONS

Donald Davis, one of the founders of southern Indiana's power supply cooperative, served his last year as president of Hoosier Energy's board of directors in 1982. It was, Davis reflected the next year, "the most trying time that I can remember." The financial stress of adding the Merom plant in the utility's rate base had included significant rate increases to members in the early 1980s.

Much of southern Indiana and the nation were reeling from the lingering effect of the recession. Davis admitted, "the board had differences of opinion" about the rate increases. But board members "faced the issues squarely," Davis continued. "They confronted the challenges and upheld their responsibilities. They examined the problems, sought workable solutions and made sound decisions."

Computerization of Hoosier Energy's systems during the 1970s and 1980s transformed the way the cooperative did business. Dave Snapp (left) and Bob Lehman try to make sense out of a data processing run in 1979.

One of those sound decisions was for Hoosier Energy to sell tax credits, a mechanism created by the Economic Recovery Act of 1981. That act allowed utilities like Hoosier Energy to use leveraged lease arrangements to help provide funds for recently constructed projects. The 1982 sale netted $230 million in proceeds, which would allow it to pay down long-term debt on Merom and lessen rate pressures.

Hoosier Energy had shown a readiness to pursue creative financial arrangements for the Merom plant almost from the beginning. "The thinking about paying for Merom started long before that time," explained Virgil Peterson in a 1998 interview. "At that time, regular financing from the REA wasn't going to do the job. Interest rates just went through the roof. It was horrendous."

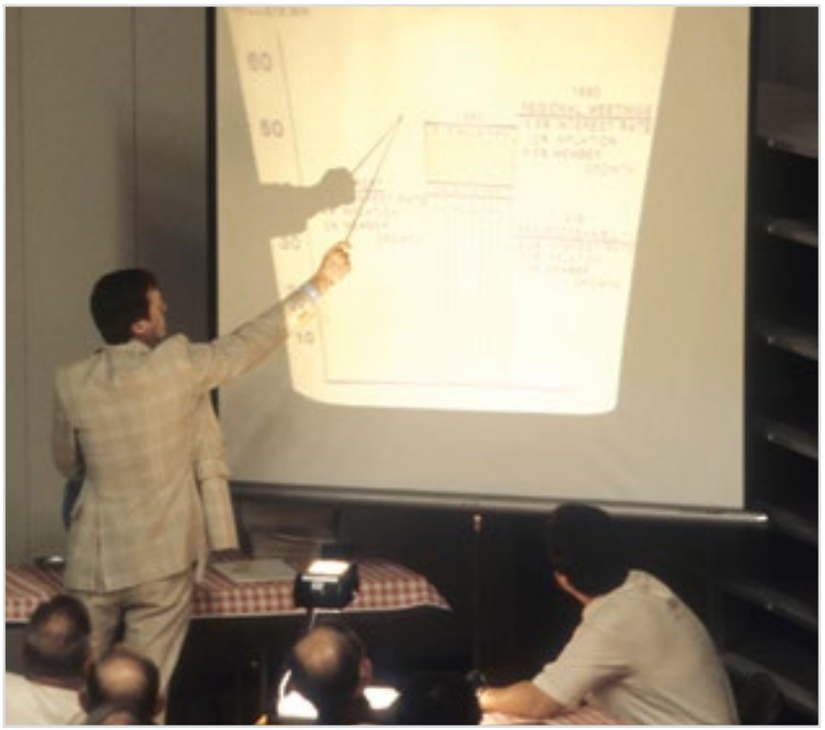
Since Rural Electrification Administration loans to begin the project were slow in

coming, Hoosier Energy received so-called bridge financing from the Louisville Bank for Cooperatives. For a portion of the pollution control equipment funding at the Merom Station, the generation and transmission cooperative utilized special financing through a city of Sullivan $100 million bond issue underwritten by major banks. Later, the Sullivan bond issue was refinanced at a lower rate through the sale of Pollution Control Tax Exempt Bonds.

Much of the work on financing packages was done by a group of cooperative veterans and newcomers alike. Tom Bernardi, Bob Jones, Jim Pawluk, Steve Smith, Dale Winter and corporate attorney Dave Huber all played key roles in the effort that helped address new environmental regulations, market surplus power from the Merom plant and complete innovative financial arrangements.

Tom Bernardi (left), shown here with Jim Pawluk in 1988, worked with Steve Smith and Virgil Peterson to complete innovative financial packages that helped reduce rate pressures.

"I was so proud of the staff we were able to attract," Peterson said.



Developing innovative financial strategies in the early 1980s helped Hoosier Energy improve its operating performance.

Peterson had hired Steve Smith. A native of Sellersburg in Clark County, Smith was a member of a family deeply rooted in the electric cooperative movement. His father was a manager of Clark County REMC, and Smith grew up learning about the cooperative program. Some of his earliest recollections were of going to the office to help his dad answer outage calls.

That helped acclimate Smith to a deep-seated cooperative spirit. Watching his father in action gave Smith an early appreciation of the issues and challenges faced by Indiana's distribution cooperatives and rural people.

"His sense of service and commitment was impressed upon me from my very early days," Smith described his father.

Although he never crafted a grand plan to work for an electric cooperative, Smith later became intrigued. He graduated from Indiana University, and was working on an MBA at I.U. when he got a temporary job researching territorial protection issues for the Indiana Statewide Association of Rural Electric Cooperatives. In 1974, Indiana Statewide recruited Smith to join a new department full-time. For the next three years, Smith gained insight and experience in legislative and member services issues at Indiana Statewide.

During his years with the state association, Smith came to the attention of Virgil Peterson. “One of the first people I brought in was Steve Smith,” Peterson said.

During the mid-1980s, Smith, the senior management team and their staffs worked with New York investment, banking and law firms to develop several innovative financial transactions. In 1985, Hoosier Energy reported its first net margin in three years.

Wall Street rating agencies responded to the improved financial position and operating performance by upgrading Hoosier Energy’s debt. More importantly, the financial turnaround allowed lowering rates to members. In the summer of 1988, the cooperative announced a two-phase rate decrease, dropping rates 15 percent.

Building the Merom facility was an important achievement for Hoosier Energy. As wholesale electric rates continued to drop throughout the late 1980s and early 1990s, Hoosier Energy had power to market and supported economic development in central and southern Indiana.

A control room operator demonstrates Ratts Station’s instrumentation for a 1982 tour of distribution cooperative managers and directors. Throughout the 1980s, the Ratts Station remained a baseload power plant for Hoosier Energy and its member cooperatives.

IMPROVING LOCAL ECONOMIES

One problem facing Hoosier Energy and its members in the 1980s was a sharp drop in the rate of increase of energy consumption. During the 1970s, Indiana electric cooperatives were recording average growth in peak demand of 8 percent to 10 percent per year. That meant that demand for electricity essentially was doubling every decade, a critical factor in the decision to build Merom.

But the upcoming recession and surging energy prices conspired to dramatically slow load growth. From 1978 to 1988, member systems' energy requirements increased at an average annual rate of only 2.6 percent.

One way to turn around the lagging growth levels was to increase sales to commercial and industrial consumers. In 1978, some 95 percent of Hoosier Energy's load was derived from farm and residential customers of its members. Central and southern

Commercial operation of the Merom Station more than quadrupled Hoosier Energy's annual coal consumption. Amax Coal's Chinook Mine east of Terre Haute was a major fuel supplier for Hoosier Energy.

Hoosier Energy's first-of-its kind economic development rate helped attract new investment and jobs.

Indiana was primarily rural throughout most of the 20th century, but as the 1980s began, domestic and foreign companies discovered the advantages of locating factories along interstate highways.

Lower taxes, good access to markets and the strong work ethic of Indiana workers attracted many companies — particularly in the automotive original equipment manufacture (OEM) market — to site plants in southern Indiana.

"Merom created a lot of interesting issues for us," said Steve Smith, who later became Hoosier Energy's president and Chief Executive Officer. "We quadrupled the amount of capacity we owned and operated in one fell swoop." Addressing financial solutions consumed time during the mid-1980s, but by 1986, the cooperative had begun to turn the corner financially. Smith recalled that "we had a little more breathing room. We could take more of a long-term focus. We were looking at adding value on a more direct, long-term, ongoing basis."

In 1985, Hoosier Energy approved an economic development rate for member systems. Holding down costs to all members, more favorable system-wide load characteristics and additional employment opportunities were all cited by the board in its decision to support the new rate.

It was part of a four-point strategy for enhancing industrial development in the region in partnership with members. Hoosier Energy created an economic development department that focused on existing industry retention and expansion, new industry recruitment, industrial site development and local economic development organization support. The power supplier helped market communities and specific sites in partnership with members and encouraged business attraction through regional economic development groups.

Hoosier Energy's economic development programs were a model for success. In 1989, Virgil Peterson discussed the cooperative's economic development efforts with Thayr Richey, director of the Indiana Department of Commerce (center), and then Lt. Governor Frank O'Bannon. Richey headed Hoosier Energy's economic development efforts before going to the Department of Commerce.

By 1990, commercial and industrial customers were becoming significant loads. Economic development efforts in 1996 contributed to one of the nation's major steel producers announcing it was locating a new finishing mill in southern Indiana.

In perhaps the biggest shift in steelmaking trends in Indiana in the 1990s, AK Steel built its Rockport Works plant that went into operation in mid-1998 in southwestern Indiana.

AK Steel was also attracted to Rockport by low energy costs. In a unique arrangement, Southern Indiana REC of Tell City split the plant's 110-megawatt load with neighboring Southern Indiana Gas & Electric. For Southern Indiana REC, the 55-megawatt load more than doubled the cooperative's size.

Automotive OEM plants, plastic injection molding operations, agricultural equipment manufacturers, computer software developers and distribution warehouses brought a new industrial and commercial focus to the region's economy.

ENVIRONMENTAL STEWARDSHIP

It's fitting that an organization with deep roots in Indiana's agricultural heritage would initiate, foster and maintain a strong position of proactive environmental stewardship.

Hoosier Energy's corporate stewardship includes comprehensive air and water quality programs and a commitment to recycling and waste reduction.

Construction of the Merom Generating Station with a state-of-the-art flue gas desulfurization (scrubber) system to remove sulfur from coal combustion by-products, established the G&T as one of the cleanest coal-fired electricity generators in the Midwest. Adjacent to the plant is the 1,500-acre Turtle Creek Reservoir that has become a popular recreation and waterfowl hunting area and fishing spot for Midwestern anglers.

The cooperative's environmental efforts extend far beyond timely compliance with federal guidelines and public recreation facilities.

That track record has depended on each employee taking responsibility for environmental awareness. Training programs and performance appraisals emphasize that commitment.

Hoosier Energy President and Chief Executive Officer Steve Smith accepted the Environmental Excellence Award from the Indiana Chamber of Commerce in 1995, which recognized the cooperative's environmental stewardship.

The cooperative has participated in research programs studying ways to use combustion by-products for building materials or other constructive purposes. An environmental management committee oversees compliance assurance and communication activities.

In 1995, the Indiana Chamber of Commerce recognized Hoosier Energy's accomplishments with an Environmental Excellence Award for innovation and research in sulfur

dioxide removal and wastewater discharge reduction at the Merom Station. “We’re proud of our environmental management record and pleased to be recognized for our innovative efforts to protect the environment,” said President and Chief Executive Officer Steve Smith when the award was presented.

The commitment goes beyond electric utility operations. On June 13, 1995, Smith, Board Chairman Philip Clark and several Indiana state officials cut the ribbon dedicating Hoosier Energy’s unique Environmental Education Center.

Located at the Merom plant’s Turtle Creek Reservoir, the center combines a fully equipped classroom and laboratory facility, sampling dock and attractive outdoor setting for a singular educational resource. Thousands of youngsters of all school ages from throughout the state have visited the center to enhance their studies in science, nature and the environment.

Students discover another world in a few ounces of water at the Environmental Education Center on Turtle Creek Reservoir.

The Environmental Education Center was dedicated on June 13, 1995. Participating in the ceremonies were (from left): Thomas Neltner, Indiana Department of Environmental Management; Suellen Reed, Indiana Superintendent of Public Instruction; Patrick Ralston, Indiana Department of Natural Resources; Hoosier Energy President and Chief Executive Officer Steve Smith; and Philip W. Clark, Hoosier Energy board chairman.

"It's very relevant to teach the lesson of stewardship — to make sure that the quality of our air and water is appropriate for those who come after us. The facility demonstrates how industry and the natural environment can exist side by side," Indiana Superintendent of Public Instruction Suellen Reed commented at the center's dedication.

With the development in 1997 of a computer-based Environmental Learning Station, Hoosier Energy's commitment to education went on the road to Indiana classrooms. A desktop computer with dozens of educational software programs, the learning station offers many of the education center's benefits in a mobile format. And the multimedia learning station allows member systems to play a more active role in promoting electric cooperatives' commitment to environmental issues.

FESTIVAL GUIDES

The rolling hills of southern and central Indiana have long been one of the top tourist attractions in the Midwest. Hoosier Energy recognized that fact early on. In 1972, it began producing a wall calendar listing community celebrations in the southern half of the state. That wall calendar has evolved into the Indiana Festival Guide, a 100-page book that lists more than 700 festivals statewide. Each year, Hoosier Energy and its member cooperatives distribute nearly 40,000 festival booklets that now list events throughout the state.

As early as the 1960s, Hoosier Energy sponsored radio advertising to promote local festivals on behalf of its member systems. In 1972, Hoosier Energy carried the concept one step forward when it published the first Southern Indiana Calendar of Events, listing 41 festivals in the area scheduled for April through October.

In 1976, the calendar was redesigned into a poster-sized fold-up map. Even with the rise in gasoline prices driven higher by the energy crises of the 1970s, Hoosier Energy produced more than 70,000 of the festival maps a year. In 1982, the Tourism Development Division of the Indiana Department of Commerce approached Hoosier Energy about co-producing the festival map. Hoosier Energy retained the copyright for the concept, and the Department of Commerce helped to more than double distribution of the guide. The present booklet format was adopted in 1986.

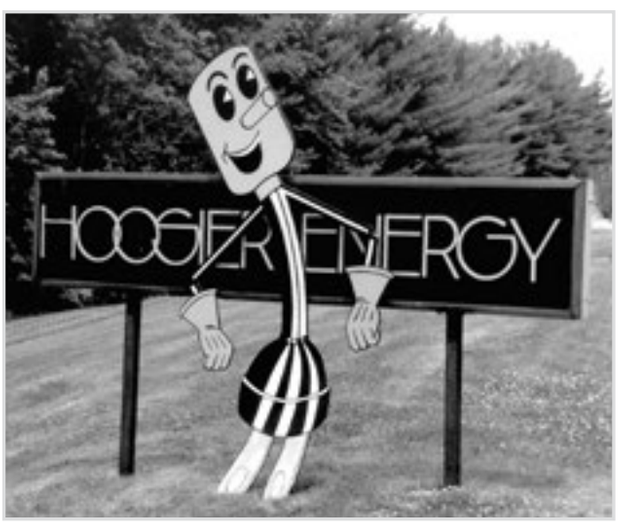
CHAPTER NINE

THE POWER OF PARTNERSHIP

One of the major changes Chief Executive Officer Steve Smith has witnessed during his 20-plus years at Hoosier Energy is the cooperative's shift in emphasis, from building and operating power plant and transmission facilities, to include a strategic business focus.

"In the earlier days, this was an organization driven by the operational and physical aspects of the business," Smith said. "It was making a transition when I came into the business in 1977."

For the most part, electric utilities abandoned marketing during the 1970s energy crisis. Utilities had invented consumer marketing in the 1920s, selling a nation on the labor-saving benefits of electric refrigerators, stoves and a host of other modern appliances. Utility advertising campaigns touted "a copper washer for a silver dollar" as a way to purchase appliances on monthly installments.



Willie Wiredhand became an icon in the 1950s for a new and better standard of living.

And the "better light means better sight" campaign improved illumination

immeasurably in American homes.

The all-electric home of the 1950s created a model for a new and better standard of living. Willie Wiredhand and Reddy Kilowatt were cartoon icons for electric power long before Madison Avenue came up with the idea of Charlie Tuna and The Jolly Green Giant.

Nationally, appliance sales had peaked by the 1970s, and electric utilities saw the 1973 and 1979 energy crises as an opportune time to dismantle sales programs. President Jimmy Carter's 1979 equation of energy conservation as "the moral equivalent of war" convinced utility executives that marketing electricity went against the national grain.

For Hoosier Energy, however, marketing electric power to wholesale customers was a necessity. On the one hand, the 1,000 megawatts of power brought on-line at the Merom Station in 1982 represented a reliable source of energy for member cooperatives well into the future.

But the power supplier had capacity beyond what was needed for its members. Selling surplus capacity would be critical to Hoosier Energy's efforts to keep member rates as low as possible while helping pay debt from the Merom plant construction.

Hoosier Energy board members grappled with many difficult issues in the 1980s.

Donald Davis' half-century of service to central and southern Indiana electric cooperatives was recognized with Hoosier Energy's Human Endeavor Award. Davis (right) accepts the award from Board Chairman Burnett Carrithers in 1989.

In spite of corporate efforts to reduce the impact of bringing the plant into service, ownership costs and rising fuel expenses put tremendous upward pressure on wholesale rates. Rates to members nearly doubled from 1981 to 1986. To keep the cost of power from rising even higher, marketing surplus power was essential.

"In the 1980s," explained Steve Smith, "we were driven by practical necessities. We had to do creative things. There was a lot of impact from Merom, with both financial and marketing challenges. We had to deal with those very real circumstances. We had to find new and innovative ways to do things."

For Hoosier Energy, 1984 marked a turning point. In April of that year, the utility began serving Henry County REMC, a New Castle-based distribution cooperative that several years earlier had become a member. In July, Clark County REMC in deep southern Indiana began receiving all its energy from Hoosier Energy when contracts with PSI ended.

A new transmission project is discussed with one of Hoosier Energy's member system's engineers.

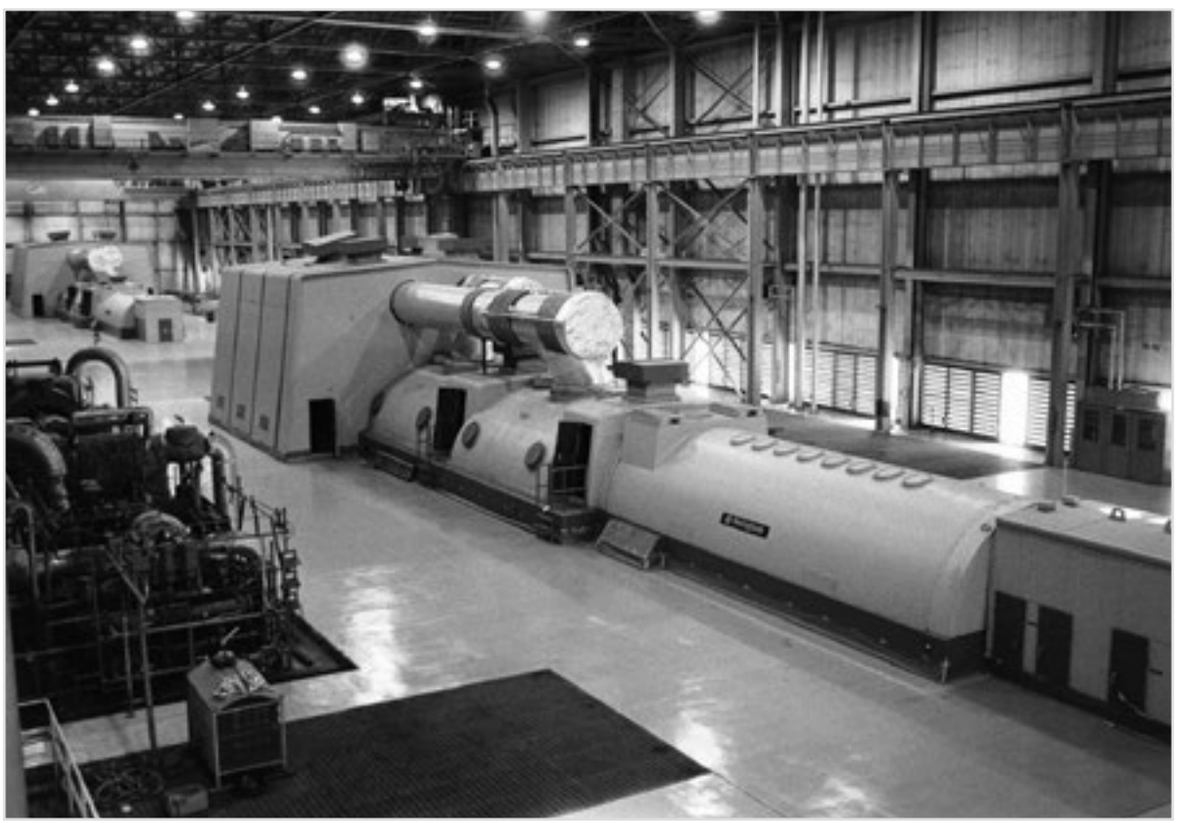
At midnight on December 31, 1984, Hoosier Energy began a 15-year sale of 400 megawatts of generating capacity from the Merom plant to Virginia Electric in Richmond, Virginia. The sale comprised nearly one-half the plant's capacity. The sale was also nearly equal to the average

demand from members in 1984.

That long-term power sale accomplished several major objectives. It alleviated the need for further wholesale rate increases to members and created increased production efficiency at the Merom plant because of the sizable baseload. The sale also allowed Hoosier Energy to better budget and plan during the period of the sale.

Dave Eger, the president of the power supply cooperative's board of directors at the time, noted that the Virginia Power sale and other bulk power marketing successes demonstrated that Hoosier Energy was becoming a major player in the region's energy market. "I feel these actions strongly express the confidence other organizations have in Hoosier Energy's ability to effectively meet their power supply requirements," Eger said early in 1985.

Hoosier Energy completed one other major bulk power sale. In 1987, negotiations



Merom Station's turbine-generators have performed yeoman-like service for Hoosier Energy since 1983 when the plant began operating.

with Wabash Valley Power Association resulted in a long-term sale averaging more than 120 megawatts.

RETAIL MARKETING PARTNERSHIP

But large power sales were only one part of Hoosier Energy's two-prong marketing effort. After 1985, the cooperative began a coordinated program to help its members market energy-efficient heating, cooling and water heating products to consumers. Using product incentives, special rates and energy-efficiency programs, Hoosier Energy and its members created a marketing partnership for the 1990s.

In true cooperative spirit, Hoosier Energy worked closely with members through the managers association and a marketing advisory committee to establish goals and craft effective programs tailored to members' needs.

"We went through an analysis with our member systems of their needs," said

As early as the 1980s, Hoosier Energy and its member systems encouraged homeowners to install energy efficient geothermal heat pump systems.

Steve Smith. “We looked at it as reaching out to better serve customers and forming a partnership that served as an extension of their staffs.”

In 1987, Hoosier Energy began a rebate program to promote installation of electric water heaters, geothermal and air-source heat pumps, and electric thermal storage units. The next year, 3,500 electric water heaters were marketed.

Another element of the power network marketing program was geared toward commercial accounts. One successful initiative was the 1989 electric thermal storage (ETS) conversion at Perry Central School that saved the school district $11,000 a year in heating costs. Hoosier Energy won an Indiana Energy Innovation Award from the Indiana Department of Commerce’s Office of Energy Policy for its work on the Perry Central project.

In 1992, Hoosier Energy and Harrison County REMC teamed up for the installation of a combination off-peak heating and cooling system at the new North Harrison High School. The school near Ramsey was the first in the state to employ the off-peak heating and cooling technology.

INNOVATION AND EFFICIENCY

Hoosier Energy’s search for innovative solutions to the challenges it has faced is also reflected in the importance of people. The cooperative movement in America is about people banding together to solve problems and achieve common good, and Hoosier Energy has recognized over the years that people make the cooperative work.

When the Merom Station began operation, Hoosier Energy faced major new issues. The workforce had doubled and generating resources had quadrupled. Managing these resources and integrating them into the existing corporate framework was a significant challenge.

The Merom Efficiency Study Committee, made up of a team of key employees, began to address this issue in 1981 before the plant was completed. Over the course of four years, the committee set about identifying best practices as an element of a plan developed to solve a host of operational, policy and workforce-related issues.

In the area of workforce development, the cooperative had a basic model to follow

when it set to work on the efficiency study. Among the most innovative employee programs in place at America's electric utilities was the Hoosier Energy Apprenticeship Training & Safety (HEATS) program. The HEATS program was begun in 1975 with the goal of offering formal apprenticeship training. The initiative was the nation's first to receive concurrent approval of the U.S. Department of Labor and the International Brotherhood of Electrical Workers (IBEW).

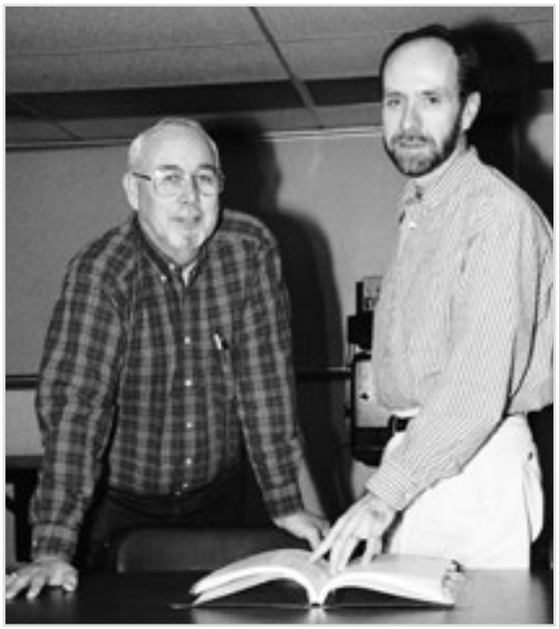
The HEATS program is administered by a committee made up of representatives of Hoosier Energy management, labor and members. Don McFarland helped create and implement the program in 1975.

Ron Berg, a former line worker and HEATS graduate who became training and safety instructor in 1987, explained. "It's a four-year program involving 144 hours of coursework and 2,000 hours of on-the-job training annually." In addition, safety and training courses are part of the program for apprentices, while skill improvement training is for experienced line personnel, he noted.

During the 1990s, electric cooperatives began offering off-peak rates to consumers who used electric thermal storage heating.

More than 300 Hoosier Energy and member system employees have graduated from the HEATS program since 1975. In addition, a number of Merom and Ratts plant employees have completed a special HEATS curriculum for power plant apprentices.

Apprentice linemen practice their skills during a session of the Hoosier Energy Apprenticeship Training & Safety (HEATS) program. More than 300 graduates have completed the four-year program since its inception in 1975.



Ron Berg (left) and Bob Richhart help administer the Hoosier Energy Apprenticeship Training & Safety (HEATS) program.

Safety and training programs have been a key to success from the early operating days at Hoosier Energy. This emphasis, coupled with programs, policies and employee commitment, helped the utility become one of the first G&Ts to earn safety accreditation through the National Rural Electric Cooperative Association.

National accreditation recognizes consistent safety efforts that go beyond minimum regulatory requirements and are a significant achievement in the electric cooperative program.

HEATS program apprentices help construct lines for the 1995 Farm Progress Show in Vigo County.

BOARD LEADERSHIP

Hoosier Energy has a tradition of strong leadership from its board of directors who bring a wide variety of life and business experiences and skills to their roles. They set policy for the cooperative through regular board meetings and serve on regular and special committees and task forces to address specific issues.

"We've experienced a lot of ups and downs," said Virgil Peterson, "and that's created pressures on the board. But I don't think you can argue with the quality of the directors we've had, particularly the chairmen."

When Peterson succeeded Frank Ratts as general manager in 1974, he served for a year with Chairman Dewey Barnett. Willard C. Kuhn, who spent 30 years on the board of Shelby County REMC, succeeded Barnett in 1975. Kuhn served as chairman until 1978, presiding over the groundbreaking for the Merom Station. Kuhn was succeeded by Donald Davis of Fayette-Union County REMC, one of the incorporators of Hoosier Energy.

"Don Davis originally came in as president of the Hoosier Energy Operating Committee, which is what we called the board of directors in the days when we were part of Indiana Statewide," explained Virgil Peterson. "Don engineered the incorporation of Hoosier Energy REC as a stand-alone entity in 1981. He was a really strong, committed chairman."

Davis was the only chairman to serve more than three consecutive years in the position. His tenure as chairman extended from 1978 to 1984. He was followed by another first. David J. Eger, chairman from 1984 to 1987, was the only member system manager to hold the office. Eger was the manager of Southern Indiana REC from 1967 to 1994. He took a seat on the board of directors in 1966 and retired following his term as chairman.

Burnett Carrithers, an electric cooperative veteran and Sullivan County REMC director, served as board chairman from 1987 to 1990. He was succeeded by Nelson Stader from South Central Indiana REMC. Stader served as Hoosier Energy board chairman from 1990 to 1993. Phillip W. Clark of Johnson County REMC then held the

chairman's position from 1993 to 1996. Clark's successor, Donald Sieg, represented Harrison County REMC. He served a three-year term ending in 1999.

Powerful leadership by Hoosier Energy's board has been a constant throughout a half-century of change. The cooperative evolved from a utility focused on building and operating power plants and transmission facilities in the 1970s, to a power supplier with strategic vision to achieve success in the 1990s and beyond.

Hoosier Energy's history of strong board leadership championed the cooperative business model.

David Eger was the only member system manager to serve as a board chair.

Harrison County REMC's Donald Sieg served in the late 1990s.

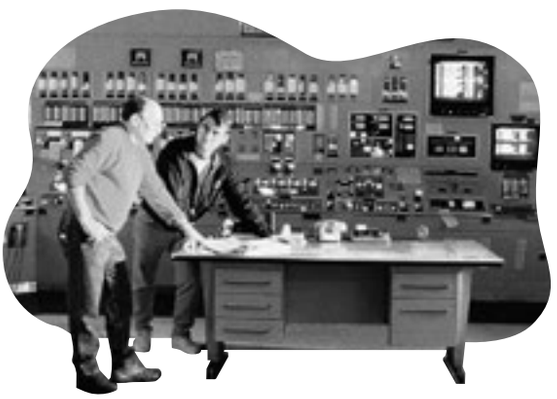
Burnett Carrithers tours the Merom Generation Station.

Nelson Stader (left), a longtime veteran of South Central Indiana REMC's board of directors, served as chairman of the Hoosier Energy Board from 1990-1993.

Donald Davis and Virgil Peterson go over strategy.

CHAPTER TEN

INDUSTRY CHANGE AND TRANSFORMATION



Hoosier Energy changed again as the 1990s dawned. Meeting challenges in a cooperative spirit has been a Hoosier Energy hallmark, whether it meant fighting to secure power resources for members, building generating plants and transmission systems, using innovative financing programs or integrating operations and business strategies to excel in an evolving industry.

The electric utility industry underwent a startling transformation in the early 1990s, and it continues to evolve today. Encouraged by government and societal trends towards a more competitive marketplace, many American monopolies were deregulated during the last two decades of the 20th century.

Landmark legislation disengaging the federal government from regulation of the marketplace brought competition to rail transportation, telecommunications, the airline industry, banking and finance from 1980 onward.

The passage of the 1978 Public Utilities Regulatory Policies Act (PURPA) laid the groundwork for deregulation of the natural gas and electric utility industries. Natural gas came first, as Congress deregulated prices at the wellhead and separated pipeline

companies from the local distribution business. PURPA also addressed the issue of electric utility deregulation, particularly on the matter of access to the industry's high-voltage transmission network by independent power producers and non-utility generators. Meanwhile, the 1980s saw increasing pressure from industrial customers to choose their power suppliers.

Full-scale deregulation of the wholesale electric utility industry was set in motion in 1992 when President George Bush signed the National Energy Policy Act (NEPA). Like PURPA 14 years before, the act provided a framework for the course of utility deregulation. But Congress left many details to the states. Federal Energy Regulatory Commission (FERC) rulings since have made access to the nation's high-voltage transmission lines a reality.

The notion that deregulation fosters competition and benefits consumers has spurred electric utility efforts during the late 1990s. Couple that with a wide variation in electric rates from state to state and region to region, and it's simple to see why many sectors of government and business are interested in deregulating the industry. Electric utilities are responding by transforming themselves from regulated monopolies, in which they provide reliable universal service to retail customers in assigned territories, to market-

Electric cooperative officials brief U.S. Senator Richard Lugar of Indiana in the early 1990s. Those in attendance included (from left): staff member Jeff Burnam; Senator Lugar; John Hacker, United REMC; Joe Huber, Harrison County REMC; Doug Stauch, Hoosier Energy; and Dave Jones, Knox County REMC.

focused, competitive energy suppliers able to transmit wholesale electric power to customers located far from traditional service territories.

That transformation has required electric utilities like Hoosier Energy to adopt a new mindset, consciously and proactively focusing on corporate business planning and strategy.

"We've continued to improve our operational performance," said Steve Smith, "and we've begun to focus on rounding out other aspects of the organization. Now we're engaged in an active strategy and planning initiatives to meet these new challenges."

During the 1990s, Hoosier Energy crews upgraded many transmission lines and substations that had been built during the 1960s and 1970s. Jim Boyd and Greg Hamm work on the Ramsey substation in 1992.

By 1996, Hoosier Energy had cemented into place its strategic plan for addressing deregulation and competition. The plan envisioned a market-driven approach that would help its members succeed in a competitive environment. Hoosier Energy contributed to that success by lowering rates in 1994 and 1995.

A CHANGE AT THE HELM

Virgil Peterson stepped down from the helm of Hoosier Energy in 1994 after 28 years of service with the Bloomington generation and transmission cooperative. Peterson could look with pride on the accomplishments of those nearly three decades: getting the cooperative up and running, struggling against sometimes seemingly insurmountable political odds to get the Ratts Station completed and in operation, and constructing, financing and operating the Merom Station at a time when utility economics had turned upside down.

In January 1994, Hoosier Energy's Board of Directors named Steve Smith as the cooperative's third President and Chief Executive Officer. Smith had good news for the generation and transmission cooperative's members when he addressed his first annual meeting in the spring of 1994. Hoosier Energy would implement a 13 percent wholesale rate decrease for members in two phases scheduled for 1994 and 1995.

Smith also addressed what he and the board viewed as the major challenge of the next decade: to successfully manage in a rapidly changing and uncertain business world. "As we navigate these uncharted waters of the future," Smith told member system directors, managers and staff, "we have a choice of attitudes — fear of the unknown or recognizing and seeking out new discoveries and opportunities. The question is, are we prepared to seek out the new world of opportunities?"

Smith and the board knew a more competitive business environment would require that spirit of tried-and-true cooperative partnership from Hoosier Energy's workforce and the member distribution cooperatives. "How we do that jointly is to best capitalize on opportunities," Smith explained. "It's done through actively collaborating with our members as true partners."

Reducing prices, improving efficiencies, maintaining high reliability and increasing services to members constituted the core strategy of the Hoosier Energy approach. "A key factor in our success will be our ability to foster and implement new ways of working together," Smith explained in his 1994 address, "to approach common needs and interests, to plan on an integrated basis, and to coordinate operations for the benefit of members and the end consumer."

Smith set the tone for his new administration when he stated, "None of us is as strong as all of us. Cooperation is the strength of the power network. We have an exciting story to tell. It's all about declining and stable electric cooperative energy costs today and tomorrow. It's about the wise and wider use of electricity having economic as well as environmental benefits. It's about improving the economy and quality of life of our communities. It's about optimism and confidence in the power network's abilities to competitively meet the needs of those we serve."

Even with the technological advances in hydraulic equipment during the 1970s and 1980s, some line work at Hoosier Energy still requires climbing poles.

BENCHMARKING AND CONTINUOUS IMPROVEMENT

Hoosier Energy moved into a new era with the realization that with or without retail and wholesale market deregulation, there would be competition in the years ahead. "Our business and strategic planning process is based on recognition of this," Smith pointed out. "Operating competitively is going to be one of the keys to success in the future."

To become truly competitive, Hoosier Energy began efforts to change the corporate culture. Operating in a regulated environment is far different than competing in a market where customers have choice. "Within the organization," Smith said, "we're building a new corporate culture in which employees are beginning to understand industry changes and business issues."

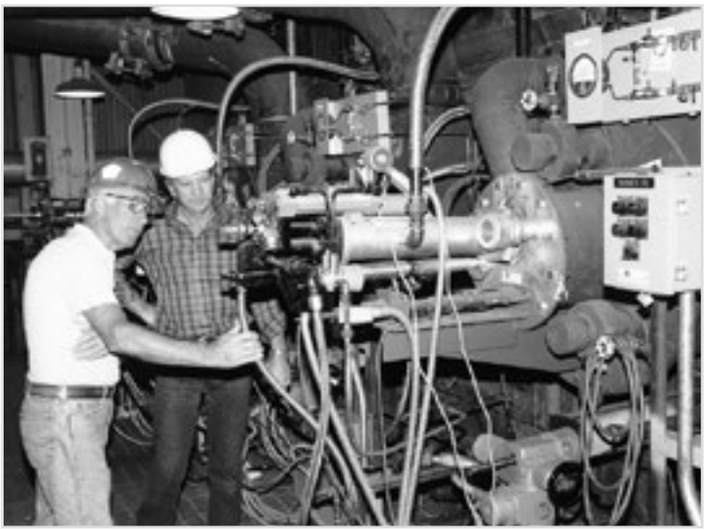
Hoosier Energy adopted another business initiative that had its origins in the earliest days of the cooperative movement. Benchmarking is a simple concept. It involves comparing and contrasting operations within and without the organization to uncover new, more efficient ways to do things.

For Hoosier Energy, the modern equivalent of benchmarking involved paying close attention to business process improvements. "Benchmarking is recognizing that you're never done," Smith said. "It's making sure that you're doing the right things and doing them well. It's the ability to find dramatic improvement by being willing to do things differently."

Steve Smith outlined his vision for a deregulated, competitive electric utility industry at Hoosier Energy's 1994 annual meeting.

The 1,070-megawatt Merom Station represents the greatest portion of Hoosier Energy's assets and is home to one-half its workforce. A multi-year program was started in 1996 to improve the plant's reliability and efficiency, and reduce operation and maintenance costs to a level that

would rank the plant in the upper 25 percent of all plants in the region. The focus of the plan is to improve work practices. The goal was to produce a 25 percent reduction in costs, and a 5 percent improvement in efficiency by the year 2000. Yet another initiative was to change the workforce culture to one team-oriented, aligned with corporate goals, and eager to seek additional performance gains.



Paul Kissling (left) and Jerry Stuffle look over a low-nitrogen-oxide burner at the Ratts Station.

The Merom management team, supported by corporate employees assigned to the plant, and consultants from the Electric Power Research Institute and others, undertook the challenge to bring about these improvements. The program has been highly successful. In 1998, the plant achieved many year 2000 goals with a foundation in place for surpassing them.

According to Dale Winter, Vice President of Operations, reaching the goals early was the result of support from Hoosier Energy's management, the leadership, hard work and commitment of the plant's management team, and genuine participation by the entire workforce.

On January 1, 1996, the Merom Station shifted from a load-following facility to a baseload facility. It became Hoosier Energy's primary resource because it was among the most efficient coal-fired power plants in the region. Throughout the 1990s, the Merom Station has achieved an average capacity factor in the upper 80-percentile range, one of the highest levels among Midwest power plants.

A similar program is underway at the three-decade-old Ratts Generating Station and within the power delivery area where comparable benefits are beginning to be achieved.

PERFORMANCE AND TECHNOLOGY

Using state-of-the-art technology to create efficiencies was an integral part of Hoosier Energy's strategic focus. Early in 1991, Darrell Goodson was named manager of Hoosier Energy's system control center. During the previous year, Goodson had served on the team charged with selecting the center's supervisory control and data acquisition (SCADA) system.

Fourteen members of the Ratts Station's 25-Year Club gather for a group photograph in 1994. Collectively, the employees had more than 350 years of experience at the Petersburg-based power plant.

The new computer system went into service in September 1991, allowing Goodson and a group of system controllers to more effectively monitor and dispatch the cooperative's high-voltage transmission network. "We're manned 24-7," Goodson said. "We do all of the energy scheduling and forecasting. We monitor the load of member cooperatives. We regulate the output of the Ratts and Merom Stations."

Hoosier Energy was among the first utilities in the country to convert control room operations to a personal computer-based system. It worked well, and provided a new level of information and control for transmission and plant operations.

Later, distance default recorders were installed to almost instantaneously pinpoint the location of line trips. Then a satellite feed was added from the National Oceanic and Atmospheric Administration that provides real-time radar, which allows better planning and next-day and next-week load forecasting. Still, system controlling and load forecasting isn't always an exact science. "There's always the human factor," Goodson explained.

Since 1996, Goodson and the system control staff have been dealing with the new entities of deregulated power markets, including power marketers, independent system operators (ISOs) and independent transmission companies (ITCs).

"These last two years have been some of the most challenging we've ever faced because of competition and deregulation," Goodson said. "It's made our jobs much more demanding."

Before the onset of wholesale market deregulation, Goodson explained, "all energy transactions were made from one utility control center to another. Now we're doing business on a system that enables us to trade electricity with power marketers. And we're beginning to work with ISOs and ITCs."

KEY INITIATIVES

Hoosier Energy structured its strategic plan around six key initiatives: cost control and efficiencies, growth in sales, financial and risk management, pricing flexibility, member services and corporate culture. By instilling in employees a sense of ownership and a business understanding, the power supplier has reaped rewards.

By 1996, the cooperative reported just over $16 million in savings and benefits, enough to justify an additional 3 percent wholesale rate decrease for member distribution systems.

Meanwhile, the power supplier was seeking additional gains. At the cooperative's 1996 annual meeting, Steve Smith sounded a warning about the dangers of complacency. "We cannot become complacent simply because neighboring utilities have had increasing rates during a period in which Hoosier Energy and your member systems have achieved price reductions," he said.

Hoosier Energy's 69,000-volt transmission system requires maintenance and upgrades to keep up reliability.

Smith went on to point out that Hoosier Energy and its member distribution cooperatives shouldn't underestimate the ability of other energy suppliers to differently price their products and become more customer-focused.

"We should recognize that in the retail market of the future, non-utility marketers and new technologies may be as much or more of a competitive force than traditional utilities," Smith said. "In that marketplace of the future, being a low-cost provider will be essential, but it's no guarantee of success."

Smith noted that service would be as important a factor as price in keeping customers. "As consumer-owned utilities," he said, "service should be our distinguishing characteristic."

Service. Low cost. Cooperation. Partnership. All are key factors in Hoosier Energy's success for half a century. And all are critical components of a strategic plan that will guide Hoosier Energy to be successful in the 21st century.

Monitoring water quality at Turtle Creek Reservoir is one of the responsibilities of the environmental staff at the Merom Station.

STEVE SMITH

Steve Smith became Hoosier Energy's third President and Chief Executive Officer in 1994.

Steve Smith has roots deep in the electric cooperative movement.

Smith grew up in the southern Indiana community of Sellersburg, a dozen miles from the Ohio River. Smith's father managed Clark County REMC, serving farmers and traditional rural areas including new subdivisions on the "sunny side" of Louisville, Kentucky. Smith recalled from his earliest days his father's "sense of service and commitment" to rural electrification.

Following graduation from high school, Smith attended Indiana University where he received his bachelor's degree in 1973. Four years later, Smith received his master's degree in Business Administration from IU.

While completing his Master of Business Administration degree, Smith started working part-time for Indiana Statewide, researching territorial protection issues. In 1974, the statewide trade association asked him to join the Indianapolis-based organization full-time. For the next three years, he worked in the legislative and member services departments, gaining experience in cooperative lobbying and legislative and public affairs.

In 1977, Virgil Peterson, then president and Chief Executive Officer of Hoosier Energy, asked Smith to join the power supply cooperative as his assistant. By 1979, Smith had added the title of division manager of administration. His duties included human resources, training and safety, communications, public affairs and information systems. In the mid-1980s, Smith took on the additional responsibilities for Hoosier Energy's new marketing and economic development programs.

Smith was later named senior vice president.

As the senior member of the executive staff, he headed a number of key corporate projects such as safe harbor leasing, the Merom Efficiency Study Committee, and strategic planning initiatives.

When Peterson retired in 1994, the Hoosier Energy Board of Directors named Smith the cooperative's third president and Chief Executive Officer.

CHAPTER ELEVEN

THE POWER OF HUMAN CONNECTIONS (THE 21ST CENTURY)

As the 21st century approaches, Hoosier Energy looks to its second 50 years of business with a strategic vision and mission in place. While the electric utility industry is striding toward a deregulated market direction, the generation and transmission cooperative is calling upon its core strengths to meet the challenges of the next millennium.

In 1998, Hoosier Energy became a member of Touchstone Energy, a unified branding initiative for electric cooperatives.

Fifty years ago Donald Davis, Frank Ratts and other rural electric directors and managers crafted the framework for a power supply cooperative in a street-front cafe in Rushville, Indiana, with little more than a notion and unyielding determination. That cooperative spirit and the power of partnership to achieve success are reasons to be optimistic in an uncertain future.

"The principle of working together to achieve benefits greater than those otherwise available to us individually has served us well," is how Hoosier Energy President and Chief Executive Officer Steve Smith summed up the cooperative spirit in a recent speech.

Electric cooperatives are again embracing the concepts that brought them together in the first place. That spirit of working together resulted in the formation of rural electric membership cooperatives during the Depression days of the 1930s. In the 1940s and 1950s, it brought about the creation of generation and transmission cooperatives. Today, cooperatives are creating partnerships and alliances that allow them to strengthen customer relationships.

For five decades, Hoosier Energy and the power network distribution cooperatives have worked in partnership to foster a better quality of life and improve the economy throughout local communities in central and southern Indiana.

Touchstone Energy Homes feature superior energy efficient design and construction.

In 1998, Hoosier Energy joined more than 500 electric cooperatives across the nation in a unified brand initiative. Touchstone Energy® will help cooperatives establish a market position and differentiate their products. National, regional and local advertising and public relations activities will increase awareness of the hallmarks of electric cooperatives. Integrity, innovation, accountability and local commitment are the characteristics that will carry cooperatives into the new millennium.

"The power of human connections is at the heart of our relationship with consumers," Steve Smith told Hoosier Energy and member system directors and managers in 1998. "As cooperatives, we have a unique customer connection. We won't let our competitors pass off a second-rate copy as the real thing."

Competition is coming to Indiana and the nation. California, Pennsylvania, Massachusetts and other states are already testing the retail marketplace in the utility business.

"The power network is the competitive yardstick for retail customer service and value over time," Smith noted. "We're not looking to make a quick profit then forsake retail customers in Indiana for higher profits in other states or overseas. We're here for the long haul."

G&T employees help educate the community about electricity with live-line safety demonstrations.

Hoosier Energy technicians, like Meter Relay Foreman Jerry Scales, use laptop computers to perform diagnostic tests on electrical equipment.

In the wholesale market where the power supplier operates, Hoosier Energy has a strong position. "Looking to the future," Steve Smith noted, "we've established a clear record of performance improvement and a favorable competitive position that provides a positive foundation to build upon." But Smith hastened to add that Hoosier Energy knows it "can and must do more to accelerate our pace of progress, as we prepare for the future."

Hoosier Energy became a market-driven organization in the early 1980s when it brought the Merom Station on line in the midst of inflation and declining load growth. That expertise has been sharpened over the years.

"Factors such as relationships, reputation, performance record and service matter when it comes to the strengths we'll need in a deregulated marketplace," Smith pointed out.

PEOPLE, POWER AND PARTNERSHIP

Perhaps Hoosier Energy's and the power network's greatest strength is its people. The more than 400 Hoosier Energy employees, and the 650 employees and 180 directors of members keep alive the cooperative spirit in central and southern Indiana and give rise to an optimistic future.

Directors and managers have played important roles in the history of Hoosier Energy. They recognized the strengths of the cooperative form of business and made it work to their advantage. The commitment of directors to the electric cooperative program is without question one of the key reasons for the power supplier's success.

Employees. They talk about dedication and mean it. They demonstrate in their willingness to get the job done right a commitment to making Hoosier Energy a leader.

Hoosier Energy is a company that's learning to be smarter and more efficient every day. Corporate strategic initiatives provide a road map for the future. While the industry continues to evolve and change, reevaluation and reassessment will occur. But the future is on sound footing.

Hoosier Energy's member cooperatives communicate messages to consumers a variety of ways, including billboards.

"Some might question whether co-ops can rise to the challenge of a restructured utility industry," Steve Smith said. "I don't need to remind you that those same kinds of questions have been raised at each and every other critical juncture in our rural electric co-op history."

For 50 years, Hoosier Energy has met challenges, won battles, and confronted change while achieving new levels of success. There is little doubt that the power supply cooperative will be successful in addressing the challenges of tomorrow.

"In this defining period," Smith concluded, "we again have an opportunity for rebirth and advancement. We must go forward with a mindset of excelling and not giving up ground as the premier customer-focused providers of choice."

CHAPTER TWELVE

GROWTH AND INDUSTRY CHANGE

If the first 50 years of Hoosier Energy's history built a business embodying the spirit of cooperation in supplying electricity at the least delivered cost, the new millennium would demonstrate how that spirit ensured growth while managing industry change almost as fast as electricity itself – at the speed of light.

As the 20th century closed, advancements in technology were on the brink of breakthroughs for a new industrial age of microprocessors and nanobytes – the perfect enabler to expand electricity delivery. Even as deregulation of wholesale markets was disrupting utilities' traditional self-supply model, Indiana would experience a steady

High-voltage electric power is delivered to member cooperatives over a network of 1,700 miles of transmission lines, 24 primary substations and more than 350 delivery points.

growth in usage up until the economic downturn of 2008. Large fossil fuel plants such as the Merom and Ratts stations were continuing to supply 100 percent of the electricity for

Hoosier Energy's member systems.

Soon, though, new generation facilities would be needed with fuel diversification leading to natural gas. Cost pressures would also continue, driven by increased environmental, reliability and cyber compliance, public policy and infrastructure build-outs to accommodate growth.

These factors, combined with two unforeseen events that served as catalysts for increased compliance and security measures, foretold new opportunities amid a sea change sweeping through the industry. That change was not lost on Hoosier Energy.

Maintenance of transmission towers helps Hoosier Energy deliver reliable power to member systems.

At the 2001 annual meeting, Steve Smith, President and Chief Executive Officer, reiterated his commitment to growth through the cooperative principles. "The question of whether we can afford continued growth is sometimes asked today," Smith said. "I think the answer is we can, and we should plan for and make adjustments to accommodate growth. Growth means new homes, jobs and opportunities for our members, and a better quality of life in the communities we serve."

As Hoosier Energy planned for the future, an event that shook the nation to its core occurred that fall. On September 11, 2001, terrorists destroyed the twin towers of the World Trade Center in Manhattan and severely damaged the Pentagon using hijacked commercial airliners as weapons of mass destruction. Thousands of innocent people were killed on the ground and in the air. After 9/11, the U.S. government created the Department of Homeland Security to focus on protection of critical infrastructure including power plants and electric utilities.

The tragic events of 9/11 represented a defining moment in the industry, bringing about changes in physical and IT infrastructure, with an emphasis on physical barriers, redundant data systems and employee identification systems as well as an increasingly intense industry focus on cyber security.

NEW MEMBERS, NEW GROWTH

In the spring of 2003 – a few months shy of another significant disturbing national event – the Jackson REMC Board of Directors voted to become a member of Hoosier Energy. With 63 employees, Brownstown, Indiana-based Jackson County REMC served 23,000 customers through 2,800 miles of line in Jackson, Washington, Scott, Jennings, Brown, Bartholomew, Clark, Jefferson, Lawrence and Monroe counties. The cooperative had purchased power from Cinergy/PSI (now Duke Energy) for 60 years and had evaluated power supply options for more than two years when it made the change.

The addition of Jackson County REMC represented the first new member system in the Hoosier Energy Power Network in nearly 20 years. “It’s nice to have a power supplier that sets its service goals and pricing in the members’ best interests,” said Jed Wheatley, then Jackson County REMC’s General Manager.

Jackson County REMC joined Hoosier Energy in 2003.

When he retired 11 years later in March 2014, Wheatley remarked how the cooperative business model has stood the test of time. “I think the cooperative form of business, ideals and motivation are alive and well, and maybe better than ever. We are always attempting to do what’s right for the customer in terms of service. It’s not about profit,” he said.

Wayne-White Counties Electric Cooperative of Fairfield, Illinois, followed in Jackson County REMC’s footsteps, joining Hoosier Energy in December 2007. Wayne-White became the 18th Hoosier Energy member and the first outside Indiana.

“Our board of directors strongly supported membership in Hoosier Energy,” said Daryl Donjon, President and Chief Executive Officer of Wayne-White Counties Electric Cooperative shortly after announcing the decision. “The number one priority of our strategic planning process … was to establish a long term, stable power supply relationship. We believe Hoosier Energy is strong and well positioned for the future.”

The addition of Wayne-White Counties Electric Cooperative in 2007 added 207 miles of transmission line and several substations and delivery points to the Hoosier Energy power network.

THE NORTHEAST BLACKOUT – A WAKE-UP CALL

A few months after Jackson County REMC joined, an unthinkable event occurred that shook the electric utility industry. On August 14, 2003 a widespread blackout spread throughout the Northeast and parts of the Midwest, leaving millions of people in New York, Ohio, Michigan, New Jersey, New England and the Canadian Province of Ontario without power on a very hot summer day. Blackouts and rolling brownouts had occurred in California, but not since 1968 had the country experienced such a massive jolt to electric service. After months of investigation, the U.S.-Canada joint report on the blackout concluded the event was preventable.

"The Northeast blackout reaffirmed concerns in the industry at that time about the adequacy of investment in infrastructure," said Mike Rampley, Senior Vice President of Marketing and Business Development. "For us, we were grateful it stopped at the Ohio border. If it had spread, Duke would have gone down and we would have followed."

Chief Executive Officer Smith noted. "The blackout reinforced how much is at stake in the industry and the grid. We're not an island in terms of our operations and reliability to our member systems. Not only does our behavior matter, but so does that of everybody around us."

STRENGTHENING THE SYSTEM

The 2003 blackout underscored the vulnerabilities of the interconnected transmission network and served as a reminder that reliability depends upon the physical realities of the grid. Upgrades and investments in the underlying physical infrastructure of power delivery are essential to reliably meeting growing power demand needs. Hoosier Energy has always been committed to strengthening its transmission system to ensure reliable power delivery to member systems.

The G&T's system reliability investments routinely include improvements such as replacing or adding large power transformers, installing regulators, upgrading technology, and use of mobile substations to maintain power delivery. Hoosier Energy also

proactively completes an annual right-of-way management program along transmission line corridors.

One major project involved upgrading 110 miles of the 161-kilovolt transmission system from Taswell to Napoleon to meet growing member demand and support capacity from the Lawrence Generating Station. The project included 14 miles of new transmission lines and replaced more than 400 line structures. In other improvements, Hoosier Energy crews have completed new distribution substations for Dubois REC, Southeastern Indiana REMC and Utilities District of Western Indiana REMC. They also completed a major upgrade of the Selmier Substation for Southeastern Indiana REMC to accommodate industrial growth in its territory.

Hoosier Energy maintains 24 primary substations throughout member system service territories.

Since 2000, Hoosier Energy's physical transmission network grew nearly 25 percent. The addition of 229 miles of transmission lines from Jackson County REMC and Wayne-White, as well as 115 new miles of line built by Hoosier Energy, brought the G&T's high-voltage delivery network from 1,380 miles in 1999 to 1,724 miles across two states in 2014. Since 2000, the G&T also built or acquired 80 additional delivery points (substations and meter points off other systems), a 40 percent increase while peak demand increased 80 percent.

From 2000-2014, Hoosier Energy invested $308 million in transmission infrastructure improvements, a 120 percent increase in asset value.

RELIABILITY IMPROVEMENTS

Throughout the cooperative's history, reliability benchmarks measured by how long and how often points on the system are out of service improved remarkably. Indeed, from

2000-2015, reliability consistently improved on Hoosier Energy-owned delivery facilities with the average outage length dropping 30 percent overall and average outage frequency dropping 38 percent. When transmission and substation facilities serving members but owned by other utilities are included with G&T system results, outage duration dropped 5 percent and outage frequency fell 19 percent in the last 15 years.

"What that shows is we've done a very good job on our own system where we have more control in driving outages down," said Power Supply Vice President Dave Sandefur. "We continue to work with neighbors to get them to drive their outages down as well."

A NEW ERA OF COMPLIANCE

After the events of 9/11 and the 2003 blackout, the industry entered into a new era of protection measures for the nation's critical infrastructure. With that heightened awareness of grid vulnerability came an influx of mandatory standards and requirements for those who manage the electric grid.

Because data systems are essential to monitoring the flow of electricity, concerns increased about potential cyber security attacks. The North American Electric Reliability Corporation (NERC) developed Critical Infrastructure Protection or CIP standards for all grid operators. The more stringent, mandatory reliability standards developed by the industry since the 2003 blackout also apply to modeling data, operating procedures and a host of reliability operations that are a major focus for utilities including Hoosier Energy. Hoosier Energy has proactively addressed more than 900 NERC standards adding a reliability compliance manager as well as participating with the Office of Homeland Security on first response measures, compliance with physical infrastructure requirements and security drills.

Additional improvements included establishing strict access controls to Hoosier Energy's headquarters, system control center and generation plants. Physical perimeter security upgrades were included, too. When the new Power Operations Center was built a decade after the blackout, Hoosier Energy placed system control operations underground.

OPPORTUNITIES THROUGH MARKETS

Meanwhile, new national policies created fundamental changes in how wholesale power was bought and sold. The Energy Policy Act of 1992 led to restructuring of wholesale energy markets. A series of orders from the Federal Energy Regulatory Commission (FERC) followed, ushering in a new era of access to the transmission grid with independent regional system operators overseeing and managing the bulk electric system.

The idea was to create greater efficiencies and economies of scale in the transfer of bulk power as it crisscrossed transmission lines - the interconnected electric superhighway. The industry would never be the same again.

When talks began in 1996 to form the Midwest Independent Transmission Organization or MISO (later renamed Midcontinent Independent System Operator) to manage such transactions, Hoosier Energy was involved in the discussions, becoming a founding member of the newly formed organization. The G&T had already recognized the advantages of off-system sales with the 400-megawatt power sale contract to Virginia Power. The 15-year Virginia Power agreement was unique in the industry when it was executed in 1984 because of the sheer distance of the contracted path.

Open access to the larger grid offered smaller utilities such as Hoosier Energy the opportunity to sell excess capacity from the Merom and Ratts stations. Deregulation's promise of eliminating multiple transmission charges stacked on top of one another – or "pancaked" rates – to transport energy appealed to the G&T.

"We had capacity to sell," said Vice President of Power Delivery Dave Sandefur. "Coming off the long-term contract with Virginia Power, we saw a lot of value with MISO. MISO provided the opportunity to expand our market reach for both selling and buying power while avoiding pancaked rates."

Becoming a member of the regional grid operator MISO gave Hoosier Energy additional opportunities to sell excess capacity.

In 2005, MISO expanded its scope by

A major upgrade at the Selmier substation helped accommodate industrial growth in Southeastern REMC's service territory.

launching an independently administered wholesale energy market. In the formative years of the FERC-approved regional power market, issues including dispatch of units, pricing and administrative fees caused much concern for Hoosier Energy. To ensure that transmission pricing in current contracts would remain intact, Hoosier Energy and several other utilities petitioned FERC for a provision in the MISO tariff to honor those pre-existing agreements. FERC agreed, allowing Hoosier Energy and others to keep these "grandfathered agreements" that saved member systems millions of dollars annually. Obtaining and defending grandfathered agreements from subsequent challenges reflect the cooperative spirit of providing affordable and reliable energy to members.

Hoosier Energy's experience and interaction with MISO has proven to be mostly positive and provided net benefits, according to Sandefur. MISO has continued to evolve and made progress toward reducing spot market price volatility through a fully-functioning transparent balancing market, created new opportunities for utilities to buy and sell energy and strengthened regional reliability.

WHOLESALE POWER CONTRACT EXTENSIONS

Wholesale power contracts with member systems provide the underpinning the cooperative business structure needs to ensure a foundation for least-cost financing in this capital-intensive business. In 2003, members executed long-term wholesale power contract extensions to 2040 that strengthened Hoosier Energy's ability to plan and finance future projects, a move members would repeat 10 years later. In 2013, all 18 members approved wholesale power contract extensions to 2050.

In a decision that illustrates the cooperative principle of democratic member control, in 2013 the members unanimously added an automatic renewal provision to the 31-36

year contracts. This evergreen provision, unusual in the utility world, automatically extends the term of the wholesale power contract for an additional five-year period on each five-year anniversary date unless any member or Hoosier Energy gives written notice of intent not to extend at least six months prior to any fifth-year anniversary date. The unique feature keeps the contract term between 31-36 years, which supports long-term planning and related financing to meet member needs.

Given the uncertainties that characterize the wholesale power industry, an evergreen provision for a long-term supply contract is rare. The willingness of members to extend contracts past the cooperative's 100-year anniversary reflects their trust in each other and in their G&T, a trust the power supply cooperative takes very seriously.

BUILDING FINANCIAL STRATEGIES

Throughout a period of significant capital investments for transmission system expansions and upgrades, new generating resources and environmental controls, Hoosier Energy remained focused on maintaining a competitive wholesale rate position while achieving sound financial metrics.

Strategies included modifying rate structures and features to support timely cost recovery, replacing a cumbersome mortgage with Rural Utilities Service (RUS) with a streamlined indenture, which opened up access to capital markets beyond RUS, and implementing a structured risk management and hedging program.

The strategies enabled Hoosier Energy to more than just weather the nation's financial crisis in 2007-2009. The G&T maintained its competitive rate position and retired patronage to members as scheduled while improving its equity position from 13.6 percent in 1999 to 17.4 percent in 2014. Rating agencies recognized the efforts and Hoosier Energy ended 2014 with improved ratings and outlooks from both Moody's (A2 stable) and Standard & Poor's (A stable).

Over the last 15 years, Hoosier Energy enacted several proactive financial strategies, building on the foundation of the wholesale power contracts. Building a strong financial foundation through wholesale power contracts enabled the G&T to look for opportunities to diversify its portfolio and further its risk management objectives.

CAPITAL CREDITS: THE CO-OP DIFFERENCE

The cooperative business model is built upon the foundation of clarity of purpose. Because cooperatives are non-profits owned by their members, they invest to provide and improve services that benefit members and the communities they serve. Patronage capital is one of the unique characteristics of the cooperative form of business. Allocating and retiring capital credits are practices that distinguish co-ops from other businesses.

Margins at electric cooperatives are allocated to their members. Capital is required for ongoing expenses, emergency reserves and repayment of loans. The bylaws of most cooperatives allow them to use margins for a period of time to maintain a healthy financial position. When the financial position of the cooperative allows for margins to be returned to consumers, the board of directors may approve payment of the credits to members.

The Hoosier Energy bylaws authorize retention of margins for 25 years. Based upon the sound financial position of the G&T, Hoosier Energy authorized paying out capital credits to member systems in 2000, 25 years after the first allocation in 1975, and has continued distributions for every year since. That first payment of $1.7 million went to 14 member systems and launched the tradition of President and Chief Executive Officer Steve Smith visiting annually with each member system board of directors.

President and CEO Steve Smith presents a check to Maynard Lambertus, former board chairman of Harrison REMC, during one of Smith's annual patronage visits.

"These meetings are very helpful for me because it gives me a chance to hear what is on the minds of member directors," said Smith who typically meets with the boards over a meal. "These are the owners of the business and their perspective is important."

Patronage retirements and related special bill credits have totaled nearly $83 million since 2000, a testament to "The Cooperative Difference."

GROWTH IN RELIABILITY, CYBER SECURITY REQUIREMENTS

The massive blackout in 2003 that left 55 million people in the Northeast, Midwest and Canada without power prompted Congress to adopt mandatory and enforceable electric reliability standards as part of the Energy Policy Act of 2005.

As a result of that legislation, the North American Electric Reliability Council (NERC) became the North American Electric Reliability Corporation, responsible for the standard development process and enforcement, with oversight from the Federal Energy Regulatory Commission (FERC). The first mandatory enforceable standards went into effect in June 2007.

Since then approximately 110 standards have been developed with more than 900 requirements for all aspects of grid reliability including standards for modeling, data and analysis, planning, emergency operations, cyber security, vegetation management and disturbance reporting, as well as standards specific to nuclear power plants.

Audits for compliance with those standards take place every three years. "Compliance is extremely complex," said Bob Solomon, Manager of NERC Compliance. "More than 25 subject matter experts across the company help us with documentation, reporting, audit preparation and self assessments."

Hoosier Energy was recognized for industry best practices in the 2013 Critical Infrastructure Protection (CIP) audit, earning praise for demonstrating innovative technology solutions, comprehensive policies and effective compliance program structure.

Bob Solomon, Manager of NERC Compliance, and Justin Swarens, Manager of System Control Services, provide training during an audit prep session.

CHAPTER THIRTEEN

SYSTEM EXPANSION AND DIVERSIFICATION

In the post Y2k era, Hoosier Energy began taking steps to diversify its generation portfolio beyond coal-based resources to include natural gas generation, purchased power contracts supported by multiple facilities and renewable energy. It was a shift toward a broader "all-of-the-above" strategy that reflected prudent risk management and positioned the G&T for future growth of the generation fleet.

The move to natural gas made sense. Record summer peak demands in 2001 and 2002 illustrated the need for the flexibility that quick-start gas units offered for matching short-term spikes in member load requirements. The use of "peaking" plants also lessened exposure to spot market pricing, which had become more volatile. With a healthy 3.5 percent average annual growth rate, a more favorable industry outlook for gas supply and the opportunity to build or purchase gas plants at attractive prices, Hoosier Energy concluded that diversifying its 100 percent coal-fired generation fleet would better match emerging needs and contribute to lower long-term costs for members.

Gas-fired peaking units can start up quickly and can provide an ideal generation source when demand is very high, such as on a hot summer afternoon. Their flexibility fits hand-in-glove with Hoosier Energy's demand profile, which fluctuates widely depending upon the season and consumer usage throughout the day.

"Natural gas had come into its own," recalled Steve Smith, President and Chief Executive Officer of Hoosier Energy. "Large coal plants like Merom are designed to operate around the clock. Merom and Ratts serve us well. But in looking at our long-range integrated resource plan, adding peaking resources made sense operationally and economically."

Start-up of the 174-megawatt Worthington Peaking Station in June 2000 established the cooperative's move toward diversification for its generation fleet. Worthington quickly proved its value. With its ability to come on line quickly, the new peaking plant provided Hoosier Energy members with power from late June until mid-September during that hot summer.

A PEAKING STATION IN LAWRENCE COUNTY

In the fall of 2002, Hoosier Energy announced plans to build a six-unit, 258-megawatt natural gas-fired peaking plant on a 48-acre site in southern Indiana's Lawrence County, the largest capital project since completion of the Merom Station two decades earlier. Wabash Valley Power Association (WVPA), the generation and transmission cooperative that serves cooperatives in northern Indiana, became a joint owner assuming a one-third interest in the plant. Remaining capacity was retained by Hoosier Energy, which would operate the facility. With the addition of the Lawrence

The Lawrence Generating Station provides power during high demand periods and is an important asset in the diversification of Hoosier Energy's generation portfolio.

County peaking plant, Hoosier Energy's gas-fired generation had increased to almost 350 megawatts in less than five years.

A few years later, in March 2008, the Hoosier Energy Board of Directors authorized investing $193 million to purchase a 50 percent interest in the 630-megawatt Holland Energy plant in another venture with Wabash Valley Power Association. The combined cycle gas plant filled a capacity need that also fit Hoosier Energy members' load profile. Holland allowed the cooperative to reduce market purchases and further diversified the generation fleet, adding a flexible generation resource to meet intermediate needs when demand is higher than average but not approaching peak levels.

Located on a 220-acre site in rural Shelby County, Illinois, the Holland Energy plant produces power from two General Electric combustion turbines supplied by a major Corpus Christi-to-Chicago natural gas pipeline. The power is transmitted across Ameren's nearby 345-kilovolt transmission line. Hoosier Energy and Wabash Valley executed a $380 million purchase agreement for the facility with Tenaska Capital Management, an independent energy company.

"Lawrence and Worthington, with their quick ramp up, ramp down gave us better flexibility to meet peak loads," Smith said. "It's a flexibility we never had before. Then we added Holland. Together, these three gas plants allow us to better match the appropriate generation source to fit our load shape," Smith explained.

The 258-megawatt Lawrence Generating Station dedication ceremony in 2005 included several Hoosier Energy board members, Indiana's Lt. Governor and Hoosier Energy's President and CEO. Pictured here from left to right: Dale Walther of Whitewater Valley REMC, Augie Bauer of Daviess-Martin County REMC, Charles Meier of Bartholomew County REMC and then chair of the Hoosier Energy Board of Directors, then-Indiana Lt. Governor Becky Skillman, Hoosier Energy President and Chief Executive Officer Steve Smith and Eugene Roberts of Orange County REMC.

Hoosier Energy's diversification strategy also included long-term purchase contracts with

Duke Energy Indiana (DEI), an investor owned utility (IOU) closely interconnected with Hoosier Energy's system. Two 100-megawatt purchases from Duke were concluded in 2007 and a third 50-megawatt agreement was later negotiated for delivery beginning in 2016. These "slice-of-system" agreements provide capacity and energy from all units in DEI's fleet of coal and gas plants. In combination with Hoosier Energy's gas plants, the cost-based contracts helped reduce Hoosier Energy's risk of overdependence on one or two generating units and also further reduced market risks.

ADVENT OF RENEWABLES THAT MAKES SENSE

With coal and gas remaining as the primary fuel choices to meet baseload, intermediate and peaking needs, Hoosier Energy turned its attention to renewables as another important source to mitigate risk and further environmental sustainability.

In the mid-2000s, renewable energy was on the rise as technologies gained public and industry support and became more cost competitive. The Indiana General Assembly debated more than once whether to enact a renewable energy mandate, but never agreed on a renewable portfolio standard for the state's utilities.

The Hoosier Energy Board of Directors recognized the advantages of exploring integration of renewables into the power supply portfolio, and in 2006 adopted a voluntary goal to seek two percent of its sales from renewable energy sources by 2011.

Hoosier Energy co-owns the combined cycle 630-megawatt Holland Energy plant in Shelby County, Illinois with Wabash Valley Power Association.

When Hoosier Energy met that goal, the target was increased in 2014 to 10 percent of total generation by 2025. The G&T has moved aggressively to expand renewables in its generation portfolio without being subject to any regulatory requirements or mandates.

Hoosier Energy began pursuing renewable opportunities that made sense economically. In its early search, the G&T put a particular focus on landfill gas plants. These cost-efficient facilities are available to operate around-the-clock, making them less intermittent than other renewable options, and have the added benefit of eliminating methane, a potent greenhouse gas, from the environment.

"Hoosier Energy works to ensure that all methane from landfills that supply our plants gets collected and is available for generation instead of being released into the atmosphere," said Mike Rampley, Senior Vice President of Marketing and Business Development. "We now have two operating plants, a third is about to begin construction, and a fourth on the drawing boards."

In 2007, Hoosier Energy commissioned the cooperative's first renewable energy facility – the two-megawatt Clark-Floyd landfill methane plant near Sellersburg, Indiana that was upgraded to three and a half megawatts in 2009. In 2011, the 15-megawatt Livingston landfill methane plant near Pontiac, Illinois was purchased, refurbished and put into operation in 2013. Production at the planned 16-megawatt Orchard Hills landfill plant near Rockford, Illinois is slated to begin in 2016. An additional

The Clark-Floyd landfill methane plant near Sellersburg, Indiana turns methane gas into renewable energy.

landfill gas plant in eastern Indiana has been approved for development.

In 2013, Hoosier Energy completed and began operating the 13-megawatt Osprey Point Renewable Energy Station in Sullivan County adjacent to the Merom Station. The unique coalbed methane generation project uses methane from coal seams underground to produce electricity. Osprey Point Station is the first North American coalbed methane project to deliver electricity directly to the power grid.

When the Hoosier Energy Board toured the cooperative's generating facilities in May 2013, they saw firsthand several renewable energy facilities. The tour took them through the Osprey Point facility that was synchronized to the grid just days prior to the directors' visit. The facility impressed Director Harry Althoff of Southeastern Indiana REMC. "Osprey Point is an environmental project that is a good step for us," said Althoff, a 20-year member of the board.

Wind, hydro and solar projects round out Hoosier Energy's renewable portfolio.

The G&T added 25 megawatts of wind from an Iowa wind project in 2008 through a joint venture facilitated by Indianapolis-based ACES Power Marketing. Hoosier Energy, along with five other power supply cooperatives, secured a portion of the project's 150-megawatt output. Later, Hoosier Energy doubled its wind capacity, adding another 25 megawatts of wind energy in 2014 through a power purchase agreement with the Rail Splitter facility near Bloomington,

Osprey Point Station is the nation's first coalbed methane project to deliver electricity directly to the grid.

Illinois. Additionally, in 2011, the cooperative executed a power purchase agreement for about 4 megawatts of capacity from the Dayton Hydro plant on the Fox River near Dayton, Illinois.

When prices for utility scale solar projects - facilities with at least one megawatt of generating capacity - dropped 60 percent from 2011 and 2014, Hoosier Energy began exploring that resource option as well. As an intermittent resource, solar potentially offers small increments of power when it may be needed most, such as on hot summer afternoons. In recognition of this potential value and as a further commitment to renewable energy, the Hoosier Energy board approved a 10-megawatt solar program in July 2014 to serve the 18 member cooperatives. By the end of 2016, 10 one-megawatt solar facilities are planned for installation at sites across member service territories.

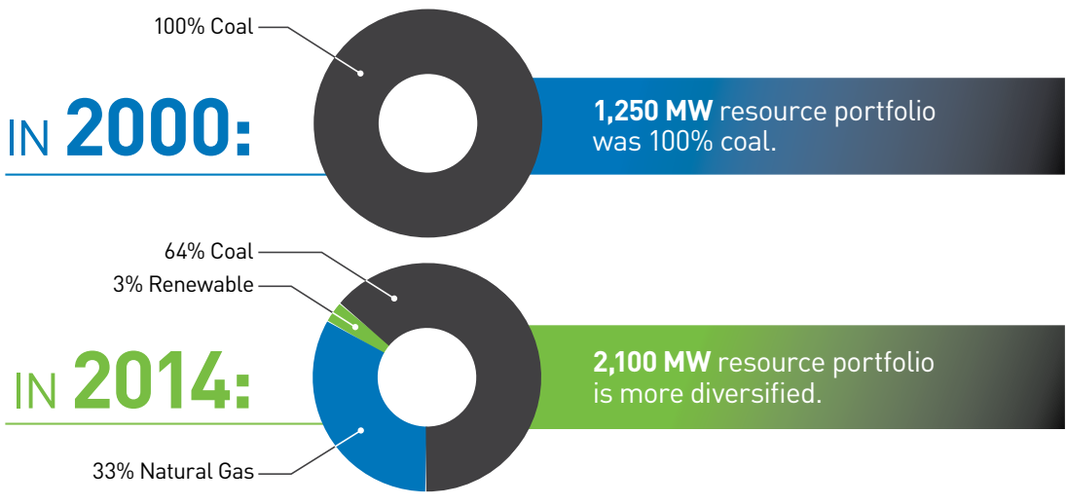
Since 2000, Hoosier Energy's 1,250 MW resource portfolio has gone from 100 percent coal to a 2,100 MW portfolio that includes 64 percent coal, 33 percent natural gas

The 4-megawatt Dayton Hydro plant on the Fox River near Dayton, Illinois produces approximately 18 million kilowatt-hours of clean energy in a typical year.

and three percent renewables.

The cooperative is a founding member of the National Renewable Cooperative Organization (NRCO), which assists generation and transmission cooperatives to achieve economies of scale through cooperation on renewable energy projects.

Hoosier Energy also developed small-scale wind and solar demonstration projects with member systems and provided funding for members to develop their own projects. Energy production figures from these small, residential-scale units are posted on the G&T's website to provide real-time data to consumers who may be considering purchasing small systems.



COST-EFFECTIVE RENEWABLE FINANCING

One of the keys to Hoosier Energy's cost-effective program of renewable energy projects was access to Clean Renewable Energy Bonds (CREBs). CREBs were created under the Energy Policy Act of 2005 to provide state or local governments and electric cooperatives with a federal incentive to invest in renewable energy, similar to the production tax credits available to IOUs.

Hoosier Energy led the nation by taking advantage of more than $95 million in CREBs funds, yet another example of Hoosier Energy's focus on long-term least cost financing to bring affordable power to its member systems.

ANOTHER, MORE PAINFUL DECISION

By 2012, the ongoing cost of implementing more stringent environmental controls for power plants was causing concern about the future of the coal plants in America. Between 2009 and 2012, U.S. companies either retired or converted more than 36,000 megawatts of coal-fired generating plants to other fuels. Most plants slated for closing were older facilities built between the end of World War II and the beginning of the 1970s. Their owners elected to shutter them rather than make expensive new environmental investments required by federal regulations.

With member energy needs projected to increase 24 percent by 2035, adding different kinds of generation with a variety of operational attributes made sense to meet Hoosier Energy's long-term energy needs. But taking generation away, that was another matter altogether.

Two weeks before the 2012 annual meeting, the Board of Directors made the painful decision to forego additional major capital investment in the Ratts Generating Station, Indiana's first cooperative-owned power plant. Hoosier Energy would continue to consider options while staying true to its least-cost strategy. But cost and risk management dictated that Hoosier Energy concentrate its environmental investments at the G&T's largest asset – the Merom Generating Station. Newer, larger and more efficient than Ratts, the Merom Generating Station was in the best position to meet increasingly strict environmental regulations.

Increasingly costly environmental compliance regulations led Hoosier Energy's board to decide to idle the pioneering Ratts Generating Station in April 2015.

The decision meant a slowdown in operation at Ratts and declining output as the plant prepared to idle

by the spring of 2015.

The Ratts Generating Station holds a special place in the history of Hoosier Energy and Indiana's rural electric program. It was at center stage in the battle for cooperative generation in the state. The plant has a highly dedicated, close-knit workforce with an unmatched record for safety, surpassing eight years in 2014 without a lost-time accident. The plant has performed superbly for more than 40 years and continues to have useful life.

However, after more than a year of exhaustive studies, the G&T cooperative could not justify investing $100 million to $200 million in the Ratts Generating Station to comply with environmental mandates. In the final analysis, the decision would not significantly impact rates or trigger an immediate need for new capacity.

Steve Smith, the son of a co-op manager who as a teen followed the Ratts battle word-for-word in the newspapers, explained the difficult decision to idle the plant.

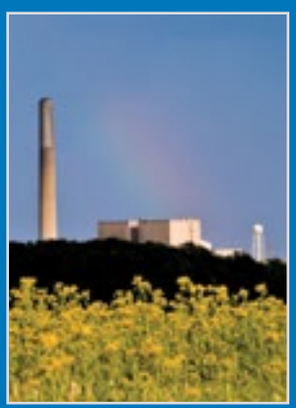
"This was not one of the things that I expected to have to deal with on my watch," Smith said. "Some, including me, were hoping the analysis would point to a different decision. But we are also absolutely committed to staying true to the path of providing our members least-cost power. And Ratts just didn't fit."

Hoosier Energy and its members continue to support a diverse power supply mix that balances reliability, cost and environmental concerns – an "all-of-the-above" approach to meeting member power supply needs. As Smith pointed out at the 2014 annual meeting, "We have no perfect energy choices. All are flawed. All are needed."

The Rail Splitter project in Illinois provides 25 megawatts of renewable capacity to Hoosier Energy member systems.

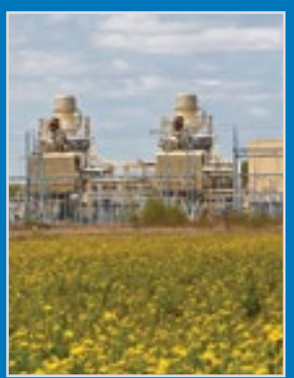
BASELOAD, INTERMEDIATE AND PEAKING POWER PLANTS

Three different types of power plants - baseload, peaking and intermediate – help meet consumer demand as it fluctuates.



Baseload: Merom

Baseload plants form the backbone of the electric power system. Costly to build, these large plants are designed to run around-the-clock, except when taken off line for maintenance. Coal and nuclear are the typical plants that meet base electric system needs. They take a long time to "ramp up" or come back on line to full capacity and have limited capability to vary their output. Hoosier Energy owns two baseload coal plants – the 1,070-megawatt Merom Station and the 234-megawatt Ratts Generating Station.



Intermediate: Holland

Intermediate generation fills the gap between baseload and peaking units. These plants run more often than peakers, but not necessarily 24 x 7 like a baseload plant. Intermediate generators can better adjust production levels to accommodate intermittent renewable sources such as wind or solar power. The 630-megawatt natural gas Holland Energy Power Plant is designed to meet Hoosier Energy's intermediate load requirements. Purchase power agreements and short-term purchases in wholesale power markets also help fill this need.

Peaking: Lawrence

Peaking plants run a few times a year for short periods, often during sudden hot or cold spells when demand surges. These plants are usually natural gas facilities. Their flexible quick-start capability makes them desirable for meeting sudden increases in power usage. Hoosier Energy owns two gas-fired peaking plants – the 174-megawatt Worthington Generating Station and the 258-megawatt Lawrence Generating Station, both jointly owned with Wabash Valley Power Association.

Renewables such as wind, solar, landfill gas and hydro round out Hoosier Energy's all-of-the-above generation fleet.

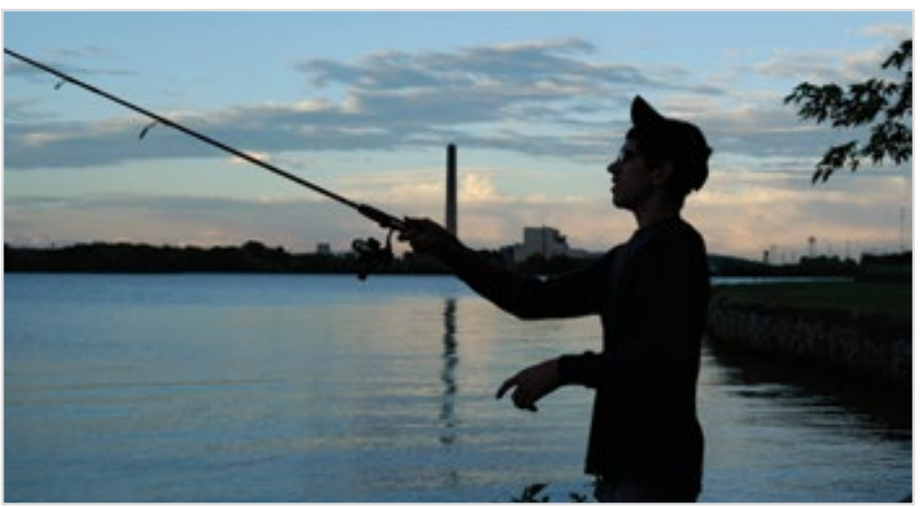
CHAPTER FOURTEEN

CARE FOR COMMUNITY

Electric cooperatives are proud of their focus on affordable rates, reliability and helping local communities. That's why cooperatives – including Hoosier Energy – have a strong interest in protecting the environment. After all, cooperative directors, employees and members breathe the air and drink the water in the same communities where they live and work every day.

The proactive cooperative approach to concern for the community cannot be overstated. Throughout Hoosier Energy's 65-year history, environmental stewardship has been an important element of the cooperative's business model and a priority in business decisions. It led to the decision to create a cooling reservoir at Merom that would benefit the nearby community as a haven for fish and waterfowl. Turtle Creek Reservoir's education center has helped a generation of children and adults learn about science, energy and the environment.

"As a cooperative, we have always believed in stewardship," said Bob Richhart, Vice President of Management



Turtle Creek, the cooling reservoir for the Merom Generating Station, is a popular spot for waterfowl hunting and fishing.

Services. “We will be good environmental stewards, and we will balance that with providing members with reliable and affordable electricity. We do the right things. It’s a Hoosier Energy core principle.”

PROACTIVE STEWARDSHIP

Congressional passage of the 1990 Clean Air Act Amendments prompted several regulations aimed at reducing impacts on air quality. Many of those regulations affected air emissions from power plants.

Hoosier Energy’s proactive approach to meeting member needs through a least-cost strategy also extends to environmental compliance efforts. The G&T’s team of environmental specialists manages compliance with literally thousands of environmental rules and regulations for air and water. Hoosier Energy prides itself on meeting regulatory requirements while finding ways to communicate and work effectively with regulators, legislators and members, particularly in interpreting often-complex environmental regulations.

In many cases throughout its history, Hoosier Energy not only met but exceeded

Land and Forest Specialist Charles Haney, left, and Environmental Team Leader Lon Petts coordinate several projects at the Merom Generating Station, including working with Purdue University on a tree project.

regulatory emission thresholds – and often earlier than required, resulting in significant savings compared with industry averages. Installation of selective catalytic reduction (SCR) technology at Merom in 2004 removed a greater percentage of nitrogen oxide (NOx) than called for in federal standards at an installed cost about 40 percent below the industry average.

Selective catalytic reduction technology was instrumental in helping Hoosier Energy reduce air emissions 91 percent from 1983-2014.

From 1983 - the first full year of operations at Merom - to 2014, Hoosier Energy reduced air emissions from its plants by 91 percent while diversifying its power supply portfolio to include new generation from natural gas, landfill gas, coalbed methane and other renewables.

Justifiably proud of its track record in meeting or exceeding air emission regulations, the G&T invested more than $500 million from 2000-2014 to ensure continued protection of the environment, achieving significant environmental successes while staying true to least-cost and risk management priorities.

PUBLIC POLICY TRENDS

Balancing environmental protection, economic growth, and reliable and affordable electricity requires constant vigilance on public policy. Regulations also affect the transmission network and grid reliability and there are costs associated with compliance. Today, regulations drive about 15 percent of Hoosier Energy's wholesale rate. Nationwide, electric cooperatives have long advocated for legislative and regulatory policies that are scientifically sound, cost-effective and balance both consumer interest and environmental protection.

Over time, federal air regulations began to move from establishing standards for emission reductions to a focus on wider ranging objectives for power supply resources. Providing regulatory guidance for achievable reductions in sulfur dioxide and nitrous oxide broadened, for example, to include proposed rules to address climate change.

The debate over climate change usually centers on greenhouse gas (GHG) emissions. Public officials have considered several approaches to reducing GHG over the years, for voluntary reduction targets, mandatory carbon taxes and cap and trade regulations.

In June 2014, the EPA released a plan for stricter emission standards on existing power plants, targeting reductions in carbon dioxide (CO_2) emissions as well as more stringent operating requirements for coal and gas plants and proposed energy efficiency and renewable mandates. The "Clean Power Plan's" unprecedented approach caused all sides of the greenhouse gas debate to take notice.

Across the industry, reaction to the proposed plan was unprecedented. Millions of consumers, including those served by Hoosier Energy members and other cooperatives across the nation, commented on the plan's far-reaching and complex rules. For cooperatives, the implications were clear: the war on coal was far from over.

Hoosier Energy works with the local community on watershed improvement projects.

INFORMED CONSUMERS

Cooperatives believe that consumers deserve to be fully informed about causes and effects on their power supply that could result from regulatory proposals. Cost-effective coal-fired generation – an essential fuel source in Hoosier Energy's diverse power supply fleet – provides the foundation for reliable and affordable power for many electric cooperative distribution systems. Removing the nation's primary baseload fuel source through unattainable objectives, cooperatives argued, would fundamentally alter how electricity is generated and used in the United States affecting millions of consumers and businesses. Hoosier Energy and its member cooperatives supported messages favoring a diversified power supply – an "all-of-the-above energy" strategy that helps keep electricity reliable and affordable – were communicated through the Cooperative Action Network at www.action.coop.

"We don't just oppose greenhouse gas regulations," Richhart said. "Rather than just saying 'no,' Hoosier Energy says, 'here are some things that might work.' We want costs and reliability to be part of the discussion for whatever requirements eventually result. If reliability and affordability get compromised, the public is, and should be, very unforgiving."

A REGULATORY "TRAIN WRECK"

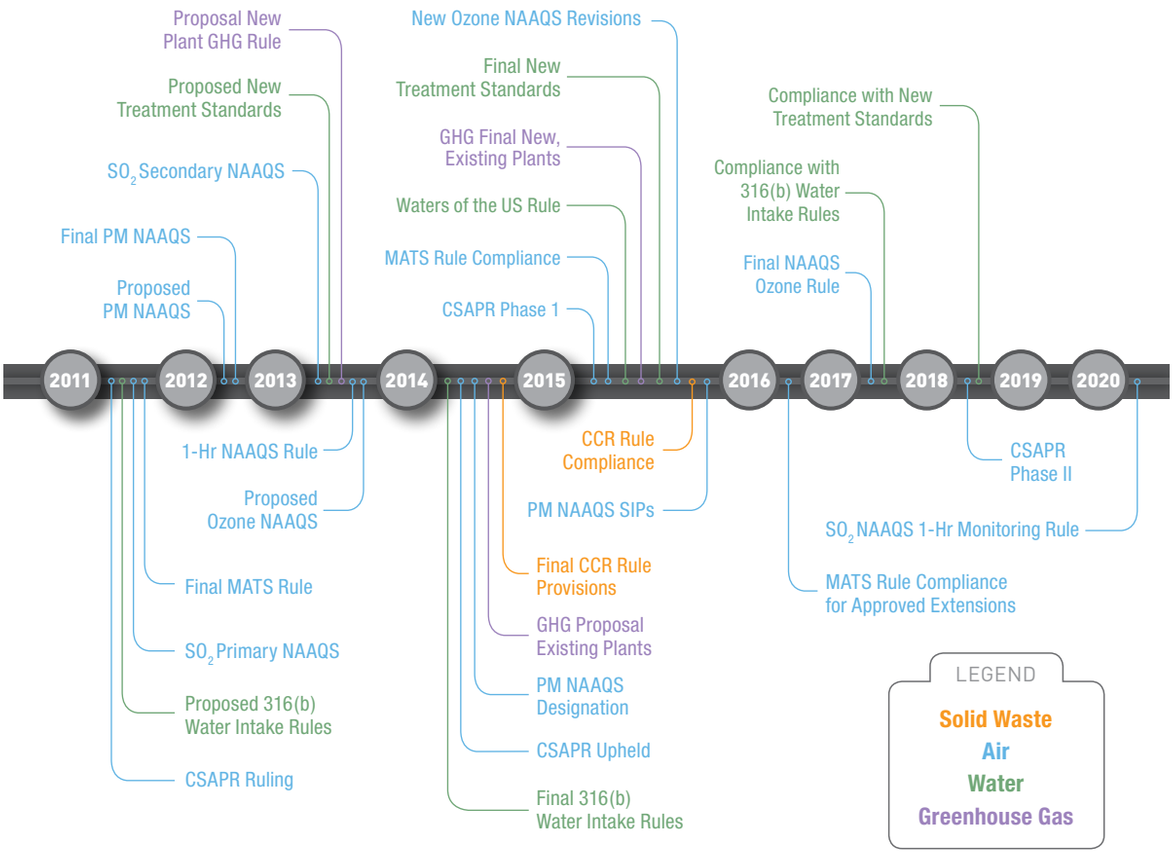
The proposed Clean Power Plan came on the heels of several new air and water regulations prompting analysts to warn of a regulatory "train wreck" waiting to happen. A summer 2012 Electric Power Research Institute (EPRI) study estimated that four major EPA rules would cost the U.S. economy $175 billion to $275 billion by 2035. The consulting firm ICF International estimated that 20 percent of America's coal power plants could be retired as soon as 2020 because of the EPA's proposed air, waste and water regulations.

Estimates vary on the impact air and water regulations will have on the electric industry and U.S. economy. But one thing is clear: the myriad of regulations affecting coal plants pose formidable challenges in compliance deadlines as well as billions in

costs - challenges that hit all too close to home for Hoosier Energy members. Ultimately, the cost to comply with environmental regulations against aggressive deadlines forced Hoosier Energy to decide in 2012 to idle the coal-fired Ratts Generating Station in 2015.

Environmental Regulatory Timeline for Coal Units

CONTINUATION OF THE "TRAIN WRECK"



LIVING LABORATORY

The Partnership for Turtle Creek Reservoir Watershed Committee demonstrates one of the most active examples of Hoosier Energy's ongoing commitment to caring for the surrounding community. Working with the local community, farmers and conservation agencies, Hoosier Energy initiated the committee to further environmentally friendly land management efforts at and around the reservoir.

The committee, comprised of local landowners, farmers, soil and water conservation district officials and a Hoosier Energy environmental specialist, meets regularly and works with the West Central Indiana Watershed Alliance, which governs watersheds in Sullivan and Vigo counties. Hoosier Energy assists with grant applications for projects such as no-till farming, two-stage ditch installation, cover crop planting and buffer strips for stream bank stabilization.

Community Earth Day activities include a visit from Freshwater Fred, the mascot for Hoosier Energy's online environmental education materials.

Other examples include a project to improve a 48-acre parcel near the Merom Generating Station. Hoosier Energy planted tall grasses to prevent soil erosion, return nutrients to the earth, and provide a natural shield for deer and wild turkey that inhabit the area. In 2012, a partnership with Purdue University was formed to study the growth of 2,800 hybrid poplar trees and how well they absorb constituents from the soil. Other efforts include preventing soil erosion and sediment buildup at the reservoir to preserve the reservoir's aquatic ecosystem.

ENVIRONMENTAL EDUCATION

Hoosier Energy's Education Center at the reservoir is another example of the G&T's environmental stewardship that extends to the community as a whole. Since the center was dedicated in June 1995, educators from across the state have taken advantage of the center's extensive hands-on environmental educational offerings both onsite and at member cooperative events.

This holistic approach to caring for communities fits member systems and Hoosier Energy – a natural extension of the cooperative way.

CHAPTER FIFTEEN

COOPERATION AMONG COOPERATIVES

Putting members first is as important for Hoosier Energy today as it was in 1949. This clarity of purpose is one of the co-op's strengths and guides its commitment to providing quality services to members.

Upgrades to transmission switching devices are part of system reliability improvements.

The breadth and scope of Hoosier Energy's services evolved in response to member needs, preferences and economy-of-scale opportunities. Programs in safety, training, economic development, marketing, communications and operations offer tangible examples of how the principle of "cooperation among cooperatives" can create value, reduce costs and deliver better service for consumers. Member driven and member focused, a number of G&T services are an outgrowth of Hoosier Energy's competencies in power supply, power delivery and risk management.

"Our members have done a good job of identifying common needs and working with each other and their G&T to fulfill those needs," said Steve Smith, President and Chief Executive Officer.

A MODEL TRAINING PROGRAM

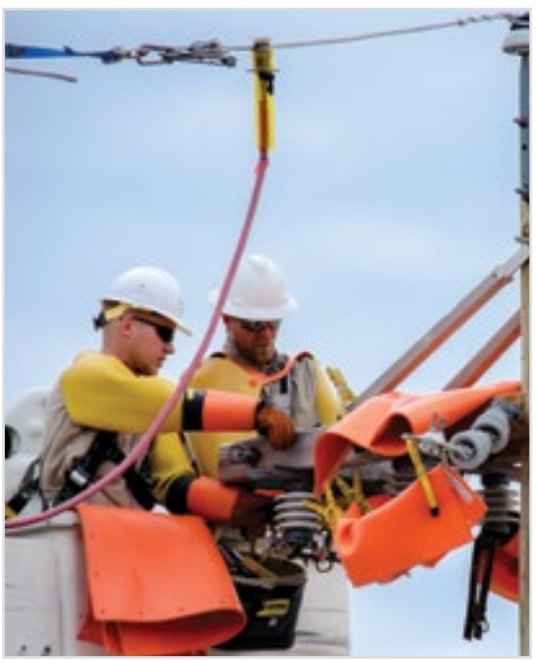
The Hoosier Energy Apprenticeship Training and Safety program, more commonly known as the "HEATS" program, offers a good example. The G&T's nationally

recognized training and safety program managed with member systems grew from simple beginnings.

In 1974, Bill Smith, Steve Smith's father and Clark County REMC manager at the time, Clark County engineer Bob Mackey and Operations Manager Bill Pascal saw a need for an apprentice program for line workers. They established a pilot training program in 1974 that formally became the Hoosier Energy Apprenticeship Training and Safety Program (HEATS) about one year later.

In the early days, HEATS focused on training line workers. Over the years, courses were added to include training for meter-relay technicians, substation personnel, power plant maintenance mechanics, electricians, and instrumentation and control technicians. HEATS apprentices now earn associate's degrees through a partnership with Ivy Tech Community College. The program requires 8,000 hours of on-the-job training, classes at Hoosier Energy's Franklin Training Center and 576 hours of classroom instruction. Thanks to the pioneering foresight of three member employees, today about 80 member and G&T employees are typically enrolled in some phase of the four-year training regimen, which by 2014 was approaching 600 total graduates.

With the early success of the HEATS program came a need for a training facility. Coincidentally, Hoosier Energy had an unused primary substation site near Franklin, Indiana, available that offered an ideal location for a training center. In 2003, Hoosier Energy opened the Franklin Training Center, official home to the HEATS program. Inside the facility classroom instruction takes place. Outside, towering poles fill the yard where participants can attend a climbing school or learn high-voltage safety processes and procedures.



High-voltage safety training is an essential component of Hoosier Energy's apprenticeship training program.

The Meter Technician program is offered at the training center as well. Instructors also deliver skill improvement sessions to each of the member cooperatives' veteran employees throughout each year, typically at local co-op offices.

More than four decades after launching a pilot program to improve the skills of apprentice line workers, the HEATS program has evolved to be recognized as a best-in-class model and facility for the electric utility industry. Through an agreement with Indiana Electric Cooperatives (IEC), the statewide cooperative organization, training at the Franklin facility by G&T staff and others is also made available to employees of cooperatives who are not members of Hoosier Energy. Apprentices who complete the program have returned as journeymen and many have moved on to serve as instructors, operations managers and superintendents at their cooperative.

"Who knows how many lives have been saved as a result of this training," commented Bob Richhart, Vice President of Management Services, who is a graduate of the third HEATS class and former instructor. "All of our members strongly support

The Franklin Training Center provides an ideal learning area for the HEATS program's climbing school.

the HEATS program. Member and Hoosier Energy employees work more safely and efficiently as a result of the training received. We learn, we share and we work together in a common cooperative education program."

ECONOMIC DEVELOPMENT TAKES OFF

Whether a new business, expansion of existing industries or new housing developments, access to affordable electricity supports growth and prosperity and leads to a better quality of life. Economic growth and the availability of reliable electricity are intricately linked. The farmers and rural residents who created the cooperative program recognized that connection and the opportunities for improved production and progress that electrification would bring. The success of Hoosier Energy's pioneering member service program provided a platform to develop another service with members that has had far-reaching effects on member-served communities.

Shortly after joining Hoosier Energy, Steve Smith began to champion the benefits of G&T support for economic development efforts to encourage job creation and investment in member-served communities. With the Merom Generating Station just coming on line, Hoosier Energy had production capacity to serve additional load and growth offered opportunities to reduce costs for existing consumers.

Meanwhile, Indiana had passed a law in 1980 that more clearly fixed the service territory of cooperatives and investor owned utilities (IOUs). The territorial protection law came after cooperatives waged a tough battle with IOUs over territory retention and service to new consumers. The law helped assure that cooperative service territories would be preserved and member systems could rely on providing long-term service to new consumers that located in those areas. The resulting certainty about long-term service also contributed to increased attention on economic development opportunities.

At that time, some uncertainty existed within the membership – were cooperatives ready to serve major industrial and commercial loads?

The G&T had started working with member cooperatives on pursuing commercial and industrial development opportunities in the late 1980s resulting in some notable successes. Thayr Richey, Hoosier Energy's first Manager of Economic Development, left

the G&T in 1988 to serve as Executive Director of the Indiana Department of Commerce, the agency responsible for economic development programs across the state. He was replaced by Mike Rampley, who would oversee the G&T's economic development efforts with members into the 21st century.

The benefits of a coordinated economic development program soon became apparent. In the early 1990s, Sullivan County REMC, which later merged with Knox County REMC to form WIN Energy REMC, helped attract the then new Wabash Valley Correctional Facility and hundreds of new jobs to rural Carlisle, Indiana. Along with Hoosier Energy's Merom Generating Station, the correctional facility remains one of the top employers in Sullivan County.

Another success story was the location of Waupaca Foundry at a Southern Indiana Power-served site in 1993. The Wisconsin-based company needed to be convinced to look at sites near Tell City for its new foundry. General Electric was closing a plant in Perry County and the community was looking for companies that could bring good jobs. Waupaca Foundry liked what it saw in the community along the Ohio River. Two decades later, Waupaca Foundry is the largest employer in the county.

Daviess-Martin County REMC and Hoosier Energy also worked together closely and with other community leaders to attract Grain Processing Corporation (GPC) to an REMC-served site near Washington, Indiana. GPC, a wet corn-milling operation that buys

The Waupaca Foundry liked what it saw in Tell City, Indiana and is now the largest employer in Perry County.

millions of bushels of corn annually from area farmers, ships trainloads of product to global customers. The mill is among the largest industrial power consumers in southern Indiana and has continued to expand its Washington operations.

In 2004, Decatur County REMC and Hoosier Energy began working with the State of Indiana to attract Honda Motors to a 1,700-acre site along Interstate 74 in Greensburg. Honda announced in 2006 that it would build a $550 million automotive assembly plant that would employ 2,300 workers by 2015. Decatur County REMC and the G&T worked closely with Honda on significant transmission and substation projects to support the plant and provide the high level of reliability and power quality required for the production facility. Fifty-three projects announced at member-served sites in 2006 generated more than $1 billion in investment for the region, added more than 90 megawatts of member load, and earned Hoosier Energy and its members recognition from Site Selection magazine as one of the top 10 utility economic development programs in the nation. It's an accolade the joint member-G&T program earned five times in a 10-year period.

Wayne White Counties Electric Cooperative in Fairfield, Illinois, and Hoosier Energy worked together in 2013 and 2014 to locate and extend transmission service to a very large underground mine in the cooperative's service area. The new White Oak Coal "long wall" mining operation brought an investment of several hundred million dollars and more than 300 jobs to the small community of McLeansboro and became the largest consumer served by the cooperative.

SERVICING KEY ACCOUNTS

Businesses grow and shrink and sometimes cease operations. Recruiting new commercial and industrial consumers to member served communities to replace jobs, load and investment that will be lost over time through attrition is important for member systems and the G&T. Supporting and retaining existing businesses, and helping commercial and industrial consumers remain competitive and grow at member-served locations, is critically important because existing businesses are the best engines for future growth.

As with most of Hoosier Energy's member services, the key accounts program originated with a member request. One day in 2000, Decatur County REMC Chief Executive Officer Don Schilling and former Bartholomew County REMC Manager Dan Arnholt approached Smith and asked to meet him at a local diner in Nashville, Indiana. Some of the largest industrial customers served by Hoosier Energy member systems were located in the co-ops' service territories. The managers asked Smith to consider establishing a key accounts pilot program to help with commercial and industrial customer relations, assessing needs and troubleshooting issues.

"Frankly, I was surprised. Cooperatives, and rightly so, are very protective of their customer relationships. We were honored by the opportunity. It's a trust we never, ever take for granted," Smith recalled 15 years later.

Since then the key accounts program has expanded to three fulltime Hoosier Energy employees who work with six member systems assigned to each of them. It's common for a Hoosier Energy key accounts manager to work from a member cooperative's office, meeting customers and offering assistance where needed. Key account representatives work with member systems to assist approximately 250 commercial and industrial

The Sugar Valley substation helps feed commercial and industrial development in east central Indiana.

accounts on an ongoing basis through services including sales tax exemptions, resolving power quality and power factor issues, load factor improvement, training, billing and rates, and energy efficiency programs.

GROWTH IN MEMBER SERVICES

Hoosier Energy's growth in member services began to accelerate in the decade from 2000 to 2009 despite the recession that hit the United States in the last two years of that decade.

When sub-prime mortgages collapsed in 2007, housing prices plummeted, sending the country into what became known as the "Great Recession." In December 2007, the national unemployment rate was 5 percent, and it had been at or below that rate for the previous 30 months. In June 2009, it was 9.5 percent. Indiana's unemployment rate jumped above 10 percent in 2009 and limited credit availability crippled basic industries. Automotive production in 2010 dropped to the lowest levels in 40 years and the state's steel mills ran at 30 percent capacity.

Indiana's State Utility Forecasting Group estimated the recession cost utilities about four years of growth. After years of strong growth, Hoosier Energy's member sales were flat in 2008 and fewer new consumers were added than in any year since the G&T began keeping records in 1970.

The downturn in load growth concerned members and Hoosier Energy. Internally, the G&T rolled up its sleeves and concentrated on creating cost efficiencies through process improvements. Externally, the power cooperative reinforced its members' efforts to look for commercial and industrial growth.

While the Honda assembly plant came on line in 2008 in the midst of the recession, by 2014 Honda was closing in on the one-millionth vehicle assembled at the Greensburg plant. Suppliers have located in nearby counties to serve the Honda facility, bringing more new jobs and investment to local communities.

Hoosier Energy's ground up approach to economic development and commitment to work with members over the long haul paid dividends over the years. Now Hoosier Energy works side-by-side with member representatives involved in more than 50

local economic development organizations in member service territories that are fundamentally engaged in promoting the economic health of their communities. Hoosier Energy sponsors commercial and industrial seminars, provides training scholarships, and supports local economic development organizations and events. The power supply cooperative offers aerial photography services, print and web advertising, assists developers in site selection, and conducts engineering and technical studies for member-served sites.

An economic development website, hoosiersites.com, features resources for potential members' business prospects that includes tax abatement, labor force, workers compensation and cost-of-living calculators.

As its 65th anniversary year drew to a close in 2014, Indiana's unemployment rate was down to 5.8 percent and Hoosier Energy was celebrating one of the best economic development years ever, with benefits all across member system territories. Three recent projects typify the breadth and scope of the long-time cooperative partnership between

Hoosier Energy's innovative economic development rate was a key factor in Honda's decision to locate in Greensburg, Indiana in 2008. Two years later, the auto plant celebrated its 100,000th Indiana Civic.

Hoosier Energy and members' economic development teams.

Boar's Head Provision: The premium delicatessen meat supplier agreed to invest $80 million in a food processing facility in a New Castle, Indiana industrial park served by Henry County REMC. The project will add 200 jobs. Hoosier Energy is expanding a substation to ensure continued industrial growth in the area.

Sugar Creek Packing Co.: The food processing plant is investing $100 million in construction, equipment and land acquisition for a plant near Cambridge City, Indiana, about 60 miles east of Indianapolis. Hoosier Energy is building a new substation for Whitewater Valley REMC to reliably accommodate future expansion of the plant that is expected to create 400 jobs.

Casey's General Stores: When Casey's General Stores announced expansion plans in 2014, the retail convenience chain chose the Vigo County Industrial Park for its new 250,000-square-foot distribution center. Hoosier Energy's economic development representatives worked with WIN Energy REMC Chief Executive Officer Tom Gregory as well as Vigo County and state officials to help attract the project to southwest Indiana. The $30 million project is expected to add 200 jobs by 2019.

Since 2000, members and Hoosier Energy have helped bring more than 24,000 new jobs and investments totaling almost $6 billion in investment to central and southern Indiana and southeastern Illinois. The fastest growing segment of Hoosier Energy member's load since 2000 has been industrial and commercial sales. Hoosier Energy

A new, 77,000-square-foot Power Delivery Operations Center includes offices, an expansive warehouse and vehicle storage areas, including bays large enough to house mobile substations.

and its members have succeeded in encouraging more than 300 new businesses to locate across the 18-member service territory and helped in excess of 300 businesses expand in industries ranging from agricultural, automotive, warehousing and food delivery.

Member cooperatives, their G&T and residents of rural areas have all benefited from the commitment to economic development. “People can’t stay in rural areas or small towns if there are no jobs or opportunities there. Results achieved in those areas over the past 25 years should be a source of pride for members,” Rampley noted.

POWER DELIVERY AND TECHNICAL OPERATIONS

The economies of scale that applied to safety and training and economic development applied to other areas as well, both technical and administrative.

Unlike some G&Ts, Hoosier Energy owns and operates the distribution substations and member delivery points down to the 12 kilovolt level. Economies of scale allow Hoosier Energy to build or repair substations, mobile substation units and member delivery points with more efficiency. Over the years, Hoosier Energy’s members have

Manager of Delivery Services Brady Mann, right, and Training and Safety Specialist Kevin Burch look over the inventory in the equipment laydown area of the Hoosier Energy Operations Center located in Owen County.

steadily entrusted the G&T to assist them in several key power delivery areas. Hoosier Energy assists member systems in regulator and recloser maintenance and rebuilds, testing for underground faults, analysis of industrial power quality issues and assistance with microwave needs.

The G&T performs underground circuit pre-installation check, maintenance, repair and troubleshooting, infrared scanning of heavily loaded lines to detect potential problems, reliability engineering assistance, and repairs on voltage regulator control panels as well as updates on ever-changing environmental regulations. Working together, Hoosier Energy and its member systems ensure the power delivery infrastructure can facilitate the highest quality, most reliable power service possible for homes and businesses.

PLANNING AND RATES

Members have sought the G&T's assistance in developing industrial and other special rates, retail rate analysis, forecasting and financial planning assistance. Members worked with Hoosier Energy to understand various rate scenarios, particularly when considering incentive wholesale rates for commercial and industrial customers.

COMMUNICATIONS

Telling the cooperative story never grows old. Cooperation created the electric co-ops and sustains its voice in our communities today. Communicating the value electricity brings to everyday lives is a key factor in maintaining the heart of the cooperative program.

The communications team at Hoosier Energy supports member communicators in their efforts to communicate to consumers the powerful benefits of their local REMC.

The team produces Hoosier Energy's longtime monthly publication EnergyLines, a source for current news about members, Hoosier Energy and industry issues that is distributed to more than 1,600 Hoosier Energy employees, member system employees, boards of directors and retirees. Other activities include customizable videos for use at annual meetings, slide programs, articles, photography and design services, as well as

assistance on press releases and special events.

In addition, Hoosier Energy manages Touchstone Energy brand projects through a coordinated media buy across all member territories, support with annual membership fees and sponsors the Indiana Festival Guide.

Hoosier Energy's other member support services include assistance on labor laws, environmental regulatory compliance, employee programs and power line safety demonstrations. In 2014, Hoosier Energy also helped four member systems with recruiting efforts to fill chief executive officer positions.

LEADERSHIP PROGRAM

In 2009, the G&T reached out to Indiana University's Kelley School of Business to help design an internal leadership development program. The program provides a cross functional framework for staff from different business areas to learn management practices and work together to solve corporate problems. Classes are structured to

Orange County REMC Chief Executive Officer Matt Deaton, right, participated in the Executive Leadership Program. Here, Matt listens to Mike Ogden, an instructor with Indiana University's Kelley School of Business.

cultivate the leadership potential of high performing employees who demonstrate a desire to excel and interest in assuming greater leadership responsibilities at Hoosier Energy. By the end of 2014, two classes totaling 25 employees had completed the one-year program, which is part of the G&T's succession management initiative. Participants are charged with sharing what they learn with other employees.

As with many Hoosier Energy services, one idea builds on another and often results in a program for member systems. Leadership program results were shared with members who expressed interest in similar training for distribution system employees. Following development with the Hoosier Energy Managers Association and Kelley School of Business, the first leadership program for member system staff was launched in December of 2014. Classes are held at the G&T headquarters with instruction from Kelley faculty. Course components include modules on self-assessment, leadership principles, strategic thinking, project management principles and practices, effective communications and decision making amid uncertainty.

The program brings together academia and industry with an emphasis on the cooperative business model. "The formal learning and projects drive real world results, making us better leaders," said Matt Deaton, Chief Executive Officer of Orange County REMC. "The projects are directly connected to the co-ops of Hoosier Energy – learning we can take back to our co-ops. Being a Chief Executive Officer requires efficient execution of strategy. I've completed a lot of training with the military, but this program changed how I think."

Dave Barton, Manager of Operations and Engineering at Clark County REMC, echoed Deaton's praise for the program. "We're seeing immediate benefits for our cooperative," Barton said. "Leadership across the organization has improved since we implemented techniques learned through the program. Now I wonder how I did it before."

CHAPTER SIXTEEN

EMPOWERING CONSUMERS

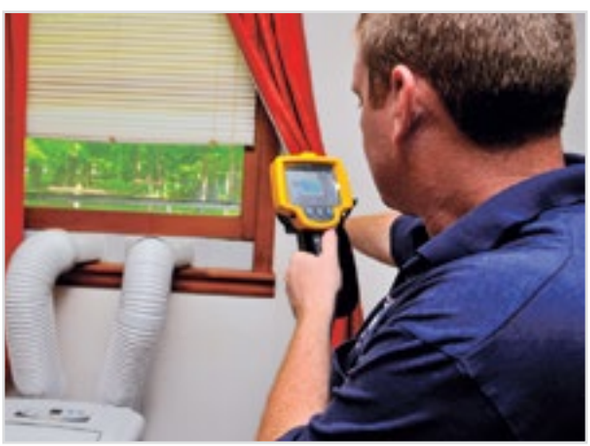
DEMAND SIDE MANAGEMENT

In addition to the economic benefits resulting from day-to-day operations and investment in infrastructure, cooperatives also power local economies through their commitment and investment in energy efficiency and Demand Side Management (DSM).

Since the 1980s, Hoosier Energy and its distribution cooperatives have been at the forefront of residential energy efficiency programs. These programs, including rebates to cooperative members who install efficient heat pumps, water heaters and other end use technologies, help homeowners and businesses save energy and money.

EFFICIENCY EFFORTS OFFSET NEW GENERATION

Sometimes called the “fifth” fuel - along with coal, nuclear, gas and renewables - efficiency benefits consumers, member systems and the G&T by helping reduce short and long-term power supply costs. The cheapest and cleanest kilowatt hour of energy is often the kilowatt-hour that isn’t used; powering down can help power up savings for consumers.



An energy efficiency specialist checks for air leaks and the effectiveness of a window’s seal.

Demand side management involves integrating consumer education with technology, incentives and price signals

to encourage the efficient use of electricity. The program focuses on helping consumers waste less energy and incorporates a long-term perspective. Every avoided megawatt and megawatt hour helps Hoosier Energy defer building or buying additional generation, which ultimately benefits all member consumers.

In the decade from 1997-2007, the rebate program resulted in avoiding 25 megawatts of new demand through incentives that resulted in installation of 19,000 high-efficiency heat pumps and 18 megawatts of off-peak heating. The Touchstone Energy Home Program, introduced in 2004, builds homes that use up to 50 percent less energy than traditional housing.

The energy efficiency services that began with rebate programs in the 1980s evolved into more sophisticated DSM and efficiency programs in the 2000s. To help consumers and members better manage power costs and to help defer the need for additional

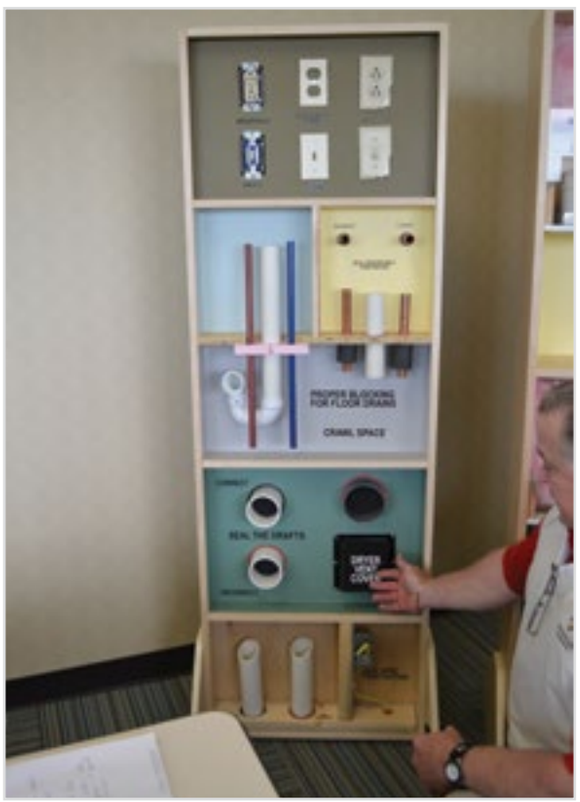
Energy efficiency specialists set up a load control device to help a farmer in Bartholomew County match field irrigation times with off-peak billing rates.

generation, the Board adopted a goal in 2008 that called for reducing projected energy and demand by 5 percent by 2018 through implementation of DSM measures.

In 2008, member systems and Hoosier Energy worked together to launch a new generation of DSM and energy efficiency programs, rolling out the comprehensive program the following year. Encouraging consumers to use electricity wisely to control energy costs suits the cooperative model of benefiting member consumers.

OUTSTANDING RESULTS

Because DSM targets end-consumer behavior and decisions, it requires close coordination and cooperation between member systems and the generation and transmission co-op. A high level of commitment from member systems is necessary for DSM to be effective. The program is a prime example of members investing the time and effort as stakeholders to develop a well thought-out plan. Within six years of launching the program, members were achieving outstanding DSM results.



Member system employees use the mobile energy wall to demonstrate energy efficiency.

Between 2009 and 2014, member systems installed more than 1.6 million DSM measures reducing winter demand by 58 megawatts over the six-year period and avoiding an estimated 1.9 million megawatt-hours that would otherwise have been billed to consumers.

Through the American Recovery and Reinvestment Act, Hoosier Energy was awarded more than $12 million in grants to weatherize thousands of low-income rural homes – most of them served by members. Combined with a power network weatherization program, more than 4,000 homes were weatherized over a six-year

period typically reducing energy consumption by about 20 percent per home and saving consumers $30 to $40 per month in energy costs.

To further consumer awareness of the program and the value of energy efficiency, Hoosier Energy created an energy wall mobile display in 2012 showcasing residential energy efficiency programs and measures available to help manage energy costs. Member systems continue to use the display for training, annual meetings and other consumer education events.

By 2014, energy efficiency and DSM programs offered by Hoosier Energy and its members included residential heating and cooling, water heating incentives, residential and commercial lighting, the Touchstone Energy Home Program, home weatherization, commercial and industrial efficiency, load control, appliance recycling and duct sealing. In its 2014 DSM annual report, Hoosier Energy noted that members had control devices installed on more than 15,000 heat pumps, water heaters and other appliances through the load control program.

SHINING A LIGHT ON SAVINGS

One of the most far-reaching elements of the energy efficiency/DSM program was distribution of more than 1.6 million compact fluorescent bulbs to consumers. Other highlights included the recycling of more than 6,000 refrigerator and freezer units through the Appliance Round-Up program, providing more than 24,000 incentives for heating and cooling equipment, weatherizing more than 4,000 homes and launching pilot programs for LED security lighting.

To improve consumer awareness and understanding of energy issues and the value of DSM, Hoosier Energy worked with members to develop the “Team Up to Power Down” campaign that was later revised to “Team Up to Save.” The campaign earned the 2012 Edgar F. Chesnutt Award, the highest consumer communications honor bestowed by the National Rural Electric Cooperative Association.

The Team Up campaign includes bill inserts, print ads, web banners, photos and messages with energy efficiency and electricity cost messages. A Team Up website links consumers to their electric cooperative where they can view co-op marketing programs

and incentives for DSM offerings.

Since 2009, the average cost of energy conserved through DSM measures is about two cents per kilowatt hour, well below the cost to provide power from traditional resources. “We constantly monitor costs and benefits so we can document which programs are working well, where there may be opportunities for improvement, and to provide transparency to member systems,” said Tom Van Paris, Hoosier Energy Vice President of Member Services and Communication. “There are complex calculations about the costs and benefits of these programs. Results have been good. Consumers, member systems and Hoosier Energy have collectively received an average of $2.32 in benefits for every dollar invested in DSM programs.”

Past chairmen of the Hoosier Energy Board gather at an NRECA meeting. From left: Eugene Roberts, Orange County REMC; Dale Walther, Whitewater Valley REMC; Jerry Jackle, Dubois REC; and Jim Weimer, Utilities District of Western Indiana REMC. In 2008, the Board set a goal of reducing projected energy and demand by 5 percent by 2018.

CHAPTER SEVENTEEN

CONTINUOUS IMPROVEMENT

Hoosier Energy is a small company that does big things.

There's a strong sense of pride among members, the Board of Directors, management team and workforce in Hoosier Energy's accomplishments over the last 65 years. The workforce's agility in making adjustments and adapting to change has become a hallmark of the G&T's success.

President and Chief Executive Officer Steve Smith attributes that distinction to the G&T's clarity of purpose: "For us, it's clear what we're trying to provide – least cost, reliable service to members. It's real."

CULTURE OF EXECUTION

Creating a culture that connects employees with business purpose motivates the power supply cooperative to consistently deliver on its promise to provide least-cost power to members. Smith is perhaps most proud of Hoosier Energy's culture of execution. He is fond of saying that all the vision and strategic planning in the world accomplishes little if not backed by solid execution.

Hoosier Energy Communications Technician Bryan Abel tests digital communications circuits. Diagnostic tools help detect potential problems in the field.

For Hoosier Energy employees, continuous

improvement is a given. The power cooperative's resiliency and focus on advancing the business in the face of industry change instills pride in the workforce because they know they are part of something bigger than themselves. Never content to look back on its successes, Hoosier Energy continually seeks to improve and move forward. From the early days of the Merom Efficiency Study Team in 1981 and negotiation of the Merom safe harbor lease, Hoosier Energy employees have succeeded by improving processes, managing costs and looking for innovative solutions.

Benchmarking and continuous improvement programs in the early 1990s formed the foundation for successes in the 2000s. For example, two forced outages at the Merom Generating Station led to formation of an assessment team to examine all aspects of Merom operations and maintenance. The Merom Assessment Team (MAT) identified maintenance and equipment upgrades and recommended changes in project management, including creation of asset management, plant management and outage management teams. The Merom Implementation Team (MIT) then worked to integrate

Benchmarking and improvement programs that began in the 1990s continue to be improved.

MAT recommendations into plant operations, emphasizing cross-functional process improvements with other divisions. What became known as “MIT-MAT” was a two-year turning point in power production efficiency, effectiveness and reliability.

Process improvements at the Merom Generating Station led to improvements throughout the company in 2006 and 2007. The cooperative formed a Cost Management and Efficiency Team (CMET) under the leadership of Management Services Vice President Bob Richhart to identify and quantify the workforce’s efforts to manage costs and develop new processes to improve operations and savings.

Under the cross-functional CMET group, the SEED process (Seeking Effective and Efficient Decisions) was developed in 2008. The SEED initiative encourages employees to offer solutions and share ideas on projects large and small.

ENGAGING TECHNOLOGY

Hoosier Energy’s commitment to leveraging technology also plays a key role in keeping costs down and efficiency up across the organization, from the system control

Joe Henson, formerly the Maintenance Manager, and Todd Davis, former Operations Manager, stand in the technological nerve center at the Ratts Generating Station.

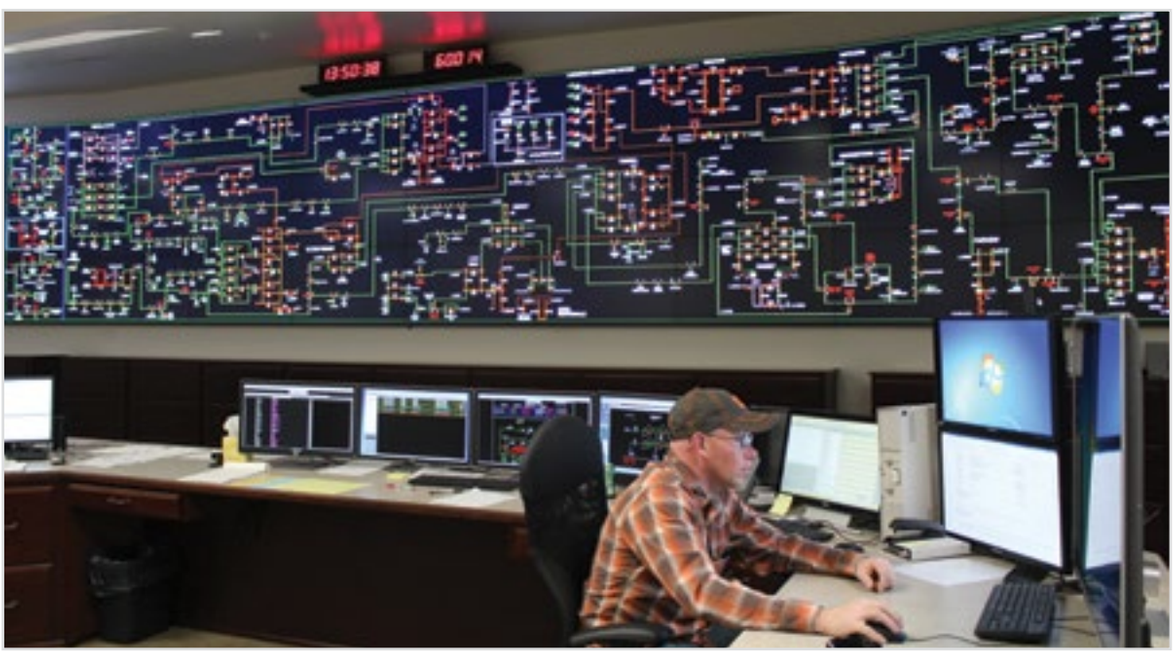
center to plant operations. Staying on top of technology means better communication, a more reliable management of the power supply network, and thousands of hours saved.

In 1991, the power cooperative was an early adopter of the use of personal computers in control room operations. By 2014, a completely updated software system in the new Power Delivery Operations Center aids system control in monitoring service to member systems. Implementation of the new Energy Management System (EMS) provides many benefits including greater situational awareness, better emergency response and greater operations and compliance efficiency.

Newer technology allows employees to work more efficiently in the field, helps streamline operations and improves maintenance, providing a quick payback on the investment.

SEEKING IMPROVEMENTS

Hoosier Energy employees pursue efficiency and cost reduction opportunities in all areas of the business – efficiencies that have saved millions in recent years. In finance, low interest rates combined with solid credit ratings translates to lower costs



A new Energy Management System at the Power Delivery Operations Center provides system control operators with greater awareness of real-time conditions.

for members. Financing deals completed in 2012 and 2013 were expected to save about $9 million annually during the succeeding 20 years compared with market alternatives. Renegotiated coal contracts and hedges against future fuel cost risks have cut costs by millions.

Always conscious of member wholesale power costs, Hoosier Energy's economic development, key accounts and rates employees work closely with member systems on tariff and contract issues. In 2008 and 2009, G&T staff worked closely with member Chief Executive Officers/ Managers to evaluate wholesale tariff options resulting in an innovative wholesale rate that was adopted by the Hoosier Energy Board of Directors. Other employees work with commercial and industrial accounts at member systems on issues such as reliability, power quality and efficiency improvements.

Phil Johnson retired from Hoosier Energy in 2009 after 36 years of service. Phil began his career as a substation mechanic and rose through the ranks to become Manager of Delivery Services. All who knew Phil respected his unwavering dedication to ensuring power delivery facilities remained in tip-top shape.

These and other success stories reflect Hoosier Energy's strong focus on cost and risk management and its pride in pursuing the cooperative purpose of neighbor helping neighbor. By 2014, Hoosier Energy employees achieved more than $22 million in benefits through improved processes, project management and execution of work.

DEVELOPING EMPLOYEES

Improving the culture of execution also means improving the capabilities of the workforce. Like many utilities in America today, Hoosier Energy is facing a major transition in its workforce. The baby boom generation of the post-World War II years is nearing retirement age – across the nation 10,000 boomers are retiring from the

workforce every day – and Hoosier Energy has already begun replacing many retiring employees.

With the retirement trend accelerating, transfer of institutional knowledge becomes critically important for the future leaders of Hoosier Energy. Technology alone won't replace experience and knowledge and Hoosier Energy has focused on developing employee skills as a part of a broader succession management program.

Employee training and development programs grew in both scope and depth throughout the 21st century, helping employees work more effectively cross-functionally and creating greater workflow efficiencies. By 2014, the G&T's range of offerings included courses in the fundamentals of leadership, project management and executive leadership. By 2014, more than 200 employees had completed the fundamentals curriculum since it began in 2006 and 25 had graduated from the executive leadership program that began in 2011. Since 2006, more than 40 percent of the G&T's employees have completed project management training and 85 have participated in the power supplier's tuition reimbursement program.

As an important player in the energy sector of the regional economy, Hoosier Energy continually looks for ways to develop its workforce and better prepare them to deal with the future challenges faced by the utility industry. "We've seen environmental regulations, supply uncertainties and economic pressures challenge the industry for years," Smith said. "Preservation of the cooperative business model depends upon future co-op leaders for these challenges and those yet to come."

BOBBY SMITH: 46 YEARS OF POWER DELIVERY

When it comes to people making a difference at Hoosier Energy, none has had a longer influence than Bobby Smith, who held employee number 39 and worked at Hoosier Energy for 46 years. The longest serving member of the cooperative's workforce, Bobby started in 1968 after serving with the U.S. Army at Check Point Charlie on the Berlin Wall. Among his other duties, he helped rebuild regulators and reclosers for member systems. This unique service saved time and money for members and improved reliability for consumers.

Bobby started work in 1968 as a driver-groundsman. He was the first person hired into the line department at the Bloomington headquarters. He switched to the substation department in 1970 and then assisted members by performing underground, residential distribution testing on transformers, voltage regulators and circuit breakers. Bobby retired in September 2014 as an Equipment Tester A in the Power Delivery Department. His 46 years of service, reached on September 3, 2014, marked him as the longest-serving Hoosier Energy employee in the cooperative's 65-year history.

Bobby Smith

CHAPTER EIGHTEEN

HOOSIER ENERGY TOMORROW

From the time Thomas Edison invented the first practical incandescent light bulb in 1879, electricity has transformed American life and laid the foundation for the modern electric world we know today. Electricity responds to our every need and powers our lives, our economy and our communities. It's impossible to fathom what life would be like without it. Reliable delivery of this remarkable product at an affordable cost for millions of Americans was one of the greatest accomplishments of the 20th century.

Flip a switch or touch a button and everything works. Deprived of it, and we get a sense of what Hoosier Energy's forefathers knew all too well 65 years ago. Reliable, affordable electricity sustains our lives and our livelihoods.

Cooperation created electric co-ops. And cooperation among those cooperatives created Hoosier Energy. Hoosier Energy began simply enough, born from a common desire among rural electric cooperatives to find a better way to provide reliable power at a fair price to their members.

That challenge remains the same today as

Hoosier Energy provides electric vehicle charging stations to employees and the public at its headquarters in Bloomington.

it did 65 years ago.

In the early years, the G&T determined how much new capacity would be needed to meet growth and then withstood the bruising battle to build the Ratts Station to meet its members' needs. Merom came next, driven by rapid growth and economies of scale and encouraged by national policy that favored coal over natural gas.

Today, the industry is more diverse with many different options at play, all with their challenges and uncertainty. A strong focus on risk management now characterizes the industry – how to diversify assets, incorporate consumer-owned generation, and how to meet increasing regulatory mandates while keeping electricity affordable for consumers.

EMERGING TRENDS

The most impactful near-term trend is a growing regulatory movement that drives national policy. Increasingly stringent environmental regulations are exerting

In 2014, the Hoosier Energy Board of Directors approved a 10-megawatt solar initiative.

unprecedented cost pressures on coal plants. That pressure is intensified by low natural gas prices and expectations of a plentiful supply of gas for decades to come. But as the electric industry experienced in the 2014 polar vortex event, inadequate gas infrastructure delivery and misalignment of the gas and electric industries raise serious concerns about over reliance on natural gas.

A more integrated electric grid seems likely, with consumer-owned generation playing an increasing role in how we produce and use power. While not replacing central station power, there may be more connectivity of consumer-owned generation to the grid. Hoosier Energy is working with members on consumer-owned or distributed generation efforts but the market continues to evolve resulting in uncertainty about the future. It may be challenging to define standards that are perceived as fair by consumers who do not own generation and those who do own it.

Aging infrastructure will continue to exert cost pressures on this capital-intensive industry while the industry faces decisions on how to fairly allocate generation and transmission costs on the grid.

Electricity consumption changes over time. Predicting growth in consumption, economic trends and the next technological breakthroughs are always inexact. How smart will the smart grid of tomorrow be? No one knows. Smart meters, smart homes and battery storage are on the horizon and will provide both challenges and opportunities for integrating into the utility-scale operations of tomorrow.

Compliance with mandatory reliability standards from the North American Electric Reliability Council (NERC) and Federal Energy Regulatory Commission (FERC) are becoming more complex. Additionally, cybersecurity efforts and costs are increasing to protect the power network from attack, damage or unauthorized access.

CLARITY OF PURPOSE

The complexity of the industry today could lead to less clarity about the business model of tomorrow. Hoosier Energy's purpose remains abundantly clear: to provide affordable and reliable energy to members.

For Hoosier Energy, the future is wrapped up in the cooperative business model

advantage. “We always ask the question: ‘Is it good for the members?’ says President and Chief Executive Officer Steve Smith. “That brings clarity of purpose. We have a strong position today, and with members and the G&T working together, a solid platform for the future.

“Electricity is still an amazing product and remarkable value. We don’t take that for granted. We continue to look for ways to control costs and keep electricity as affordable as possible.”

Hoosier Energy’s new corporate headquarters honors its past and positions the G&T for the future. The power supply cooperative looks forward to creating value for members and advancing the cooperative business model.

The group of electric cooperative leaders who gathered in that Rushville coffee shop on a June morning 65 years ago would certainly understand – and approve.

NEW FACILITIES FOR A NEW TOMORROW

Hoosier Energy finished its 65th anniversary celebration in 2014 with a move into two new facilities – a Power Delivery Operations Center in Owen County and a new headquarters facility on the south side of Bloomington. Hoosier Energy employees contributed greatly to the planning of both facilities, directly participating in creating facilities that allowed for growth and new levels of efficiency.

The Operations Center was constructed on a 90-acre site near Spencer, Indiana that features central proximity to transmission and substation assets, good transportation access and space for future growth. More than 60 operations and engineering employees are based at the Operations Center, which consists of an 18,000-square-foot office building and 77,000 square feet complex of operations offices, warehouse and vehicle storage buildings, including bays to house mobile substations.

The new 83,000-square-foot headquarters on Cooperative Way is located on a beautiful wooded area at the intersection of Indiana State Road 37 and Tapp Road, providing easy member and employee accessibility. The $27 million facility brought together more than 115 employees who had been scattered among four other sites and offers space for growth for the next 20 to 30 years.

Sustainability with minimal environmental impact was a key design consideration. Hoosier Energy is pursuing "gold" level Leadership in Energy and Environmental Design or LEED certification for the headquarters facility. The building will use about half the energy per square foot of current facilities by utilizing LED lighting, geothermal heating and cooling, "daylight harvesting," roof reflectivity and other energy saving features. Much of the building features recycled materials including wood from trees removed from the site.

The Power Delivery Operations Center in Owen County improved efficiency for the benefit of members.

CHAIRMEN OF THE BOARD –

A LEGACY OF SERVICE, DEDICATION AND COOPERATION

Hoosier Energy's bylaws state that the Chairman of the Board of Directors shall be the principal officer of the Corporation and shall preside at all meetings of the members and Board of Directors.

Rush County's Chester Meal served as the first chairman from 1949-1960. Since then, 17 directors have held the position, serving two- or three-year terms.

Chester Meal
1949-1960

Robert Peek
1960-1962

Riley Osborne
1962-1966

Dewey Barnett
1966-1975

Willard Kuhn
1975-1978

Don Davis
1978-1984

Dave Eger
1984-1987

Burnett Carrithers
1987-1990

Nelson Stader
1990-1993

Phil Clark
1993-1996

Donald Sieg
1996-1999

Larry Vogel
1999-2002

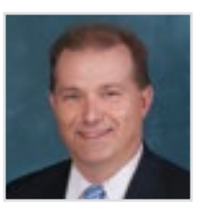
Jerry Jackle
2002-2005

Charlie Meier
2005-2008

Eugene Roberts
2008-2010

Dale Walther
2010-2012

James Weimer
2012-2014



Darin Duncan
2014-Present

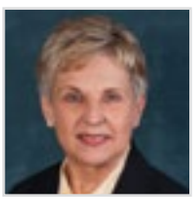
CURRENT BOARD OF DIRECTORS

Darin Duncan
Chairman
Harrison REMC

Herb Haggard
Vice Chairman
Johnson County REMC

Steve Stumler
Secretary
Clark County REMC

Bob Stroup
Treasurer
RushShelby REC, Inc.



Janet Anthony
Bartholomew County REMC

August Bauer
Daviess-Martin County REMC

Jodie Creek
Whitewater Valley REMC

Donald Cross
Henry County REMC

Steve Dieckmann
Decatur County REMC

Larry Hosselton
Wayne-White Counties
Electric Cooperative

Jerry Jackle
Dubois REC, Inc.

Jerry Pheifer
South Central Indiana REMC

Eugene Roberts
Orange County REMC

Daniel Schuckman
WIN Energy REMC

David Smith
Southeastern Indiana REMC

John Trinkle
Jackson County REMC

Gary Waninger
Southern Indiana Power

Jim Weimer
Utilities District of
Western Indiana REMC

MANAGEMENT TEAM

J. Steven Smith

President and Chief Executive Officer

Mike Rampley

Senior Vice President Marketing and Business Development

Donna Snyder

Senior Vice President and Chief Financial Officer

John Robert Horton

Vice President Power Production

Robert I. Richhart

Vice President Management Services

David W. Sandefur

Vice President Power Supply

Tom Van Paris

Vice President Member Services and Communications

Randy Haymaker

Director of Public Affairs

Christopher M. Goffinet

Attorney

HISTORY OF OPERATING COMMITTEE MEMBERS

April 16, 1962

then

BOARD OF DIRECTORS

December 16, 1980

BARTHOLOMEW COUNTY REMC

Fred Suhre – 1962-1969
T. R. Kennedy – 1969-1970
Harold Friedersdorf – 1971-1973
Mark Harper – 1973-1976
Herbert Hopkins – 1976-1977
Andrew Blankenship – 1977-1982
Marshall Boll – 1982-1983
Crystal Roscoe – 1983-1989
Clarence E. Shafer – 1989-1996
Charles Meier – 1996-2012
Janet Anthony – 2012-current

CLARK COUNTY REMC

John Willinger – 1978-1984
Wayne Johnson – 1984-1986
Charles Heil – 1986
Carl R. Popp – 1986-1997
Glenn A. Reis – 1997-2005
Jimmie L. Sanders – 2005-2009
Stephen C. Stumler – 2009-current

DAVIESS-MARTIN COUNTY REMC

Fred C. Marks – 1962-1963
Bevis McCord – 1963-1970
John Memering – 1970-1993
John Carroll – 1993-2001
August Bauer – 2001-current

DECATUR COUNTY REMC

Franklin Corya – 1962-1965
Paul Tetherow – 1965-1978
Howard Maudlin – 1978-1980
Robert R. Friedersdorf – 1980-1988
Leo J. Gasper – 1988-1996
Vaughn Tucker – 1996-2010
Steve Dieckmann – 2010-current

DUBOIS REC, INC.

L. B. White – 1962-1966
Clarence Whitsitt – 1966-1984
Edwin Pieper – 1984-1989
Jerry C. Jackle – 1989-current

FAYETTE-UNION COUNTY REMC

Donald Davis – 1962-1989
Howard W. Fields – 1989-1994
Consolidated 1/1/94 Whitewater Valley REMC

HARRISON REMC

Fred Winterkorn – 1962-1971
Vincent Ott – 1971-1974
Howard Wate – 1974-1981
Harold Weber – 1981-1985
Donald L. Sieg – 1985-2005
Darin Duncan – 2005-current

HENRY COUNTY REMC

Max Woodward – 1984-1992
William Webb – 1992-2007
Donald Cross – 2007-current

JACKSON COUNTY REMC

John Trinkle – 2003-2004
Larry Peters – 2004-2010
John Trinkle – 2010-current

JOHNSON COUNTY REMC

Willard Green – 1962-1978
Floyd Collett – 1978-1982
Philip Clark – 1982-1984
Herbert Haggard – 1984-1987
Philip W. Clark – 1987-1997
Ted R. Brewer – 1997-2001
Herbert C. Haggard – 2001-current

KNOX COUNTY REMC

Riley Osborne – 1962-1981
Marlin Dreiman – 1981-1997
Consolidated 10/1/97 WIN Energy (Western Indiana Energy REMC)

ORANGE COUNTY REMC

Harold Reynolds – 1962-1979
S. C. Bobbitt – 1979-1983
Otis Rasnic – 1983-1995
Eugene Roberts – 1995-current

RUSH COUNTY REMC

Raymond Forkner – 1962-1979
Joseph Lower – 1979-1987
Hugh V. Webb – 1987-1992
Robert Meyer – 1992-1999
Consolidated 3/1/99 RushShelby Energy REC, Inc.

RUSHSHELBY REC, INC.

Robert Meyer – March 1999-June 1999
Robert Stroup – 1999-current

SHELBY COUNTY REMC

John Armington – 1962-1970
Willard Kuhn – 1970-1993
Robert D. Stroup – 1993-1999
Consolidated 3/1/99 RushShelby Energy REC, Inc.

SOUTH CENTRAL INDIANA REMC (changed from Morgan County REMC 1/1/92)

Wade Duckworth – 1962-1963
John Walters – 1963-1974
Byron Bray – 1974-1983
Richard Coffin – 1983-1985
R. Nelson Stader – 1985-2005
Bill H. Bond – April 2005-October 2005
Steve Williamson – 2005-2006
Jerry W. Pheifer – 2006-current

SOUTHEASTERN INDIANA REMC

Walter Underwood – 1962-1974
Herbert Merkel – 1974-1990
Harry Althoff – 1990-2014
David Smith – 2014-current

SOUTHERN INDIANA POWER

Edward Purtzer – 1962-1967
David Eger – 1967-1987
Larry A. Vogel – 1987-2007
Donald Braun – 2007-2014
Gary Waninger – 2014-current

SULLIVAN COUNTY REMC

Dewey Barnett – 1962-1977
Burnett Carrithers – 1977-1995
Emil Page – 1995-1997
Consolidated 10/1/97 WIN Energy (Western Indiana Energy REMC)

UTILITIES DISTRICT OF WESTERN INDIANA (UDWI) REMC

Louis Jaffre – 1962-1982
Hobert Thompson – 1982-1992
Jack Benham – 1992-2007
James Weimer – 2007-current

WAYNE COUNTY REMC

Herschel McGrew – 1962-1974
James Barker – 1974-1977
Jack Martin – 1977-1992
Duane Smoker – 1992-1994
Consolidated 1/1/94 Whitewater Valley REMC

WAYNE-WHITE COUNTIES ELECTRIC COOPERATIVE

Larry Hosselton – 2008-current

WHITEWATER VALLEY REMC

Duane Smoker – January 1994-April 1994
Howard W. Fields – 1994-1996
Dale Walther – 1996-2014
Jodie Creek – 2014-current

WIN ENERGY REMC

Emil Page – 1997-2012
Daniel Schuckman – 2012-current

MEMBER DISTRIBUTION SYSTEM PROFILES

As of March 31, 2015	Headquarters/ Location	Number of Member-Consumers	Miles of Line	Net Utility Plant Value	Full Time Employees
Bartholomew County REMC *James Turner, General Manager/Chief Executive Officer*	Columbus, IN	11,411	1,205	38,894,209	30
Clark County REMC *David A. Vince, General Manager/Chief Executive Officer*	Monticello, IN	22,928	1,761	92,862,772	51
Daviess-Martin County REMC *Kenneth W. Frye, General Manager*	Loogootee, IN	8,014	1,361	27,616,434	25
Decatur County REMC *Don R. Schilling, President/General Manager*	Greensburg, IN	7,839	1,054	30,407,192	27
Dubois REC, Inc. *Donald E. Book, General Manager*	Jasper, IN	13,411	1,677	39,992,540	28
Harrison REMC *David C. Lett, Chief Executive Officer*	Corydon, IN	22,334	2,159	65,636,327	46
Henry County REMC *Shannon Thom, Chief Executive Officer*	New Castle, IN	9,542	1,031	18,222,582	25
Jackson County REMC *Mark McKinney, General Manager*	Brownstown, IN	23,951	2,909	77,514,750	65
Johnson County REMC *L. Chester Aubin, Chief Executive Officer*	Franklin, IN	24,333	1,632	73,213,711	55
Orange County REMC *Danny L. Arnold, General Manager/Chief Executive Officer*	Orleans, IN	7,707	1,086	28,378,319	23
RushShelby REC, Inc. *Terry W. Jobe, President/Chief Executive Officer*	Manilla, IN	14,435	2,083	63,028,663	43
South Central Indiana REMC *Gerg McKelfresh, Chief Executive Officer*	Martinsville, IN	33,488	3,549	117,361,378	88
Southeastern Indiana REMC *Keith Mathews, General Manager*	Osgood, IN	26,738	3,205	89,194,028	64
Southern Indiana Power *Steve Seibert, President/Chief Executive Officer*	Tell City, IN	9,203	1,613	36,381,056	25
Utilities District of Western Indiana REMC *Brian L. Sparks, Chief Executive Officer*	Bloomfield, IN	18,798	2,655	61,899,943	58
Wayne-White Counties Electric Cooperative *Daryl Donjon, President/Chief Executive Officer*	Fairfield, IL	13,881	3,212	54,367,607	45
Whitewater Valley REMC *Mary Jo Thomas, President/Chief Executive Officer*	Liberty, IN	11,810	1,765	32,760,806	23
WIN Energy REMC *Tom Gregory, Chief Executive Officer*	Vincennes, IN	16,747	2,639	65,709,118	48
Total		**296,570**	**36,596**	**$1,013,441,435**	**769**

HOOSIER ENERGY
CURRENT EMPLOYEES
(as of March 6, 2015)

Herbert L. Abbott
Brent A. Abel
Bryan D. Abel
Timothy W. Abrams
Darin R. Adams
Alan K. Agee
Kimberly A. Anderson
James J. Arnett
Bobby R. Asbell
Trevor R. Asche
Russell E. Aten
John H. Austin
Karl Back
Randy D. Bailey
Bill D. Baker
Philip L. Ballard
Robert A. Barnes
Jared E. Bartlett
Darrell W. Bayless
Mary Lynn Beaver
Marty B. Beck
Curtis W. Bedwell
Douglas F. Bedwell
Lawrence L. Bedwell
Tammy D. Beedie
Cory L. Berg
Jesse W. Billings
Stephen M. Blair
Michael R. Blann
Christopher S. Blunk
Michael B. Blythe
Jon H. Bobbitt
Jonathan R. Bolin
Blaine R. Bolyard
Anthony W Bonham
Paul Tyler Bonney
Sherri L. Boruff
Ashley N. Bowling
Laura L. Briggs
Frederick L. Britton
Kevin B. Brock
Mikeal W. Brock
Denise E. Brown
Gary B. Brown
Stanley E. Brown
Grant D. Bryant
Laura A. Buchanan
John E. Bullock Jr.
John P. Bunnell
Kevin W. Burch
Timothy E. Burcham
Kevin R. Burke
Brett A. Burkett
Thomas A. Burks
Gary L. Burris
Kim D. Burris
Christopher S. Burton
Joseph L. Butler
Chad S. Campbell
Donald L. Campbell
Renee M. Campbell
Julie E. Carmichael
Jeffrey K. Carter
Edward E. Chambers
Donald B. Chestnut
Craig A. Chrispell
Joshua L. Cisney
Dallas R. Clines
Kimberly S. Coffey
Patrick B. Collins
Todd A. Collins
Jason R. Compton
Ian S. Conner
Bradley P. Cook
Daryl R. Cook
Trent A. Coonce
Chad A. Cornelius
John C. Cortez
Bart A. Cosby
Douglas G. Cottingham
Dustin W. Cox
Rebecca S. Cox
Samuel R. Craft
Neil J. Craig
Damon S. Crain
Philip E. Crouch
Joseph P. Crowe

Paul A. Cummings
Tamara L. Cummings
Chadwick L. Cutliff
Laura L. Cvengros
Stephen D'Esposito
Ryan A. Dant
Lori D. Davis
Thomas R. Davis
Lance A. Davis Sr.
Christopher D. Day
Michael L. Dayhoff
Matthew H. Deal
Scott A. DeMoss
Shawn E. Dilk
Norman L. Dillon
James W. Dodd
Terry B. Donnar
Gregory R. Dooley
Perry G. Dow
W. E. Keith Drake
Scott D. Dudley
Trenton S. Dudley
Jeffrey L. Duff
Mark A. Dugan
Linda J. Duncan
Daren E. Dunford
Daniel M. Dyal
Debra L. Easter
Timothy T. Edwards
Tina M. Elliott
Stanley L. Elmore
Timothy D. Emmel
Charles W. English
Brian A. Ennis
Donnie R. Eslinger
Kyle M. Eslinger
William J. Evans
Thomas R. Ewer
Gerald A. Faletic
William S. Farmer
Brian K. Fatch
Gary M. Ferree
George E. Ferree
Edwin J. Feutz
Carl A. Field
Richard R. Field
Matthew D. Fields
Benny M. Figg
Logan P. Fish
Shelly L. Fleener
Kyle D. Foli
Bobby G. Forbus
Michelle A. Fox
Randy D. Franklin
Steven L. Freeland
James B. Gaither
Thomas E. Gallagher
Brian C. Gardner
Michael Brian Gardner
Phillip D. Gardner
Brian L. Garwood
Jonie E. Gates
Mark Gennicks
Chris A. Gerlach
Richard R. Gillingham
Kenneth R. Goff
Kenneth R. Goggins
Timothy L Goodman
Brenda K. Green
Claire E. Gregory
Mike J. Gregory
David M. Grindstaff
Harold P. Gutzwiller
Brian A. Haggard
Carter R. Hall
Randall D. Ham
Brock A. Hamilton
Dennis E. Hamilton
Fredrick L. Hamilton
David E. Hamm
Charles W. Haney
Benjamin M. Harrison
Charles E. Harrison
John T. Harrison
Susan J. Hawkins
Brian C. Hayes
Randy L. Haymaker
William P. Hayne
Howard Heath Headdy
James L. Headlee
Debra A. Heaton
David M. Helton
Chester C. Hembree
Paul J. Henderson
Ryan J. Henderson
Furriela J. Henson

Joseph G. Henson
Lisa A. Herbstreit
Jorge Miguel Hernandez Lucena
Robert D. Hill
William G. Hilton Jr.
Steven W. Hinds
Barbara L. Hirstius
Adam M. Hobbs
Paula J. Hobbs
James L. Hochgesang
John H. Hochstetler
Paul A. Hoffner
Elmer P. Hogue
Milton E. Holland
David E. Hollifield
John R. Horton
Allan W. Houchins
Clint R. House
John H. Humes
Benjamin J. Hurst
Colby D. Hutcheson
Christopher L. Hutchinson
Timothy L. Iltzsch
Thomas M. Irvin
Thomas B. Isom II
Jonathan W. Jackson
Matt B. Jackson
Maria A. Jarvis
Christopher L. Johnson
Michael N. Jones
Michael B. Kaisher
Edmund R. Karas
Patricia K. Kardynalski
William D. Kaufman
George R. Kent
Trenton W. Kile
Leslie A. King
Michelle D. King
Wallace E. King
Tony W. Kitchin
Conrad J. Kittle
Michael E. Knauer
John A. Knotts
Mark H. Kramer
Thomas P. Lammers
Elizabeth M. Langford
Jeremiah M. Ledgerwood
Richard E. LeDune
Angelynn D. Lee
Evan W. Lewellyn
Raina L. Lewis
Ronald L. Like
Marcia L. Locke
Scott E. Lockenour
William C. Lonnberg
Jeffrey J. Lookebill
Thomas R. Lott
Andrea M. Love
Warren M. Luff
Matthew L. Mabrey
Tammy K. Maegerlein
Brady M. Mann
Tyler G. Manship
Stephen M. Martin
Tammy S. Martin
Charles R. Martindale
Pennie J. Mask
Donald J. Mason
Rick L. Mauder
Jay D. Maxwell
Charles W. May
David L. McCammon
Robert E. McCammon
Michael A. McCann
Donald S. McClarney
Sandra K. McClary
Marvin D. McClure
Karen L. McEwen
Wesley W. McFarland
Mandy S. McGary
Neal J McGuffey
Larry D. McKinley
Luke D. McKinney
Terry Meade
James R. Medley Sr.
Charles P. Meister
Franklin D. Meredith
James D. Messel
Caleb A. Meyer
Robert J. Meyr
Dennis M. Miles
Alan B. Miller
Kriss M. Miller
William P. Miller
Michael E. Misner

Leslie R. Moade
Kirt A. Monk
Tracy L. Monroe
Michael J. Mooney
Brandon T. Moore
Dennis L. Moore
Ryan A. Moore
Cody R. Morgan
Paul S. Morrison
Rex P. Mowery
Michael S. Murphy
Andrew D. Myers
Barbara E. Myers
Matthew S. Nay
Nicky G. Neal
Alan D. Neeley
Eric D. Neely
Holly J. Nethery
William M. Newman
John G. Nickless
Heath D. Norrick
Thomas E. Osborn
Sara J. Ostrander
Michael A Owens
Mark W. Owings
Melissa K. Page
Katrina A. Pardue
Kyle L. Parker
Steven M. Parola
Amy D. Parrish
Robert Jay Patterson
Peter L. Perez
Ronald A. Perkinson
Michael L. Persinger
Lon M. Petts
James J. Pierson
Robert L. Pippin
William J. Pirtle
Bryan A. Place
William H. Plew Jr.
Antoinette M. Presnell
Aaron M .Price
Susan D. Provines
Carrol E. Pullum
George R. Queen
Jeffrey L. Quyle
John J. Rader
Donald C. Rahke
Pamela L. Raisor
Robert M. Rampley
Todd A. Ransford
Todd A. Rath
Robert M. Reed
Ryan A. Reed
Michalene Reilly
Jeffrey P. Retseck
Lucas B. Reynolds
Robin S. Reynolds
Cameron M. Rhoten
James W. Rice
Justin P. Rice
Mark E. Rice
Mark L. Richardson
Robert I. Richhart
Randall J. Ridge
Melissa M. Riggs
Michael D. Ring
John A. Risch
Adam C. Roberts
Charles R. Roberts
Thomas M. Roberts
John S. Robinson
Raymond E. Robinson
Michael A. Royer
Michael J. Ruhe
Ernest L. Russell
Gordon R. Russell
Michael N. Russell
Cathy A. Sachs
David O. Sacksteder
Matthew S. Salyer
Cory A. Samm
David W. Sandefur
Gregory L. Sankey
Tyler D. Schackmann
Dean K. Schmett
Frank L. Schmidt
Sherry D. Schmidtz
David M. Schroeder
Melvin E. Schutte
Lex P. Selby
Ronnie J. Shorter
Jarrod A. Shoultz
Matthew N. Shoup
Matthew A. Siena
Jerry L. Simpson

Lance M. Simpson
Todd A. Sims
Shane D. Skinner
Neal J. Sluder
Donald E. Small
Bradley S. Smith
J. Steven Smith
Lloyd T. Smith
Scott J. Smith
Timothy E. Smith
Susannah L. Smith-Burchell
Jeffrey A. Smithson
John J. Sneed
Larry D. Snellenberger
Donna L. Snyder
Robert P. Solomon
Daniel M. Souhrada
Lyle J. Sparks
Joshua E. Springer
Vincent Stankiewicz
Robert S. Stanley
Curtis E. Steele
Caleb A. Steiner
Brett A. Stephens
James D. Stewart
Andrew M. Stirn
David D. Stolz
Michael B. Stout
Matthew L. Strawser
James H. Stultz
Alan L. Summers
Jeremiah H. Sutt
Justin R. Swarens
Todd R. Taft
Jared R. Taylor
James W. Terrell
B. Kevin Tevault
James W. Thacker
Jared B. Thompson
Zachariah J. Thompson
Cameron E. Thomson
Steven L. Timms
George T. Tindall IV
Craig E Townsend
Michael E. Tracy
Michael B. Trowbridge
Paul E. Tuell
Benjamin C. Turner
Melanie J. Turner
Danny R. Turpen
Marcus C. Tuttle
Russell W. Vail
Charles S. Van Horn
Thomas L. Van Paris
Mark R. VanMeter
William L. VanMeter
Anthony Vanzo
Bernard F. Voges
Gregory F. VonFeldt
Bryan J. Wadsworth
Lisa M. Wagner
Lissa R. Walcott
William C. Walker
Marc B. Walton
William C. Ware
Marchia L. Watson
Michael P. Wayt
Bill B. Weeks
Heath R. Wehr
Thomas A. Weitekamp
Gregory A. Welsh
Heather R. Wesner
James A. West
Nathan A. Williams
Joshua A. Williamson
Robin L. Willis
Scot W. Willis
Eric A. Wilson
Arthur J. Wittman
Anthony E. Wolfe
Joshua D. Wood
Matthew J. Woodard
Troy L. Woods
Michael R. Worrell
Marsha E. Wray
Donald J. Wright
Ralph W. Yagle Jr.
Hollis L. Yensel Jr.
Paul H. Zumhingst