EXPANDING THE EDEERGRAGE HORRZON

A History of
BLACK HILLS CORPORATION

Since 1883

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Since 1883

by Eric John Abrahamson and Eric Steven Zimmer



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Historic meters and award from the Black Hills Corporation Archive, photographed by Rodger Slott.

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Foreword: Expanding the Energy Horizon ing the Frontier wood Gold olidating Power nne Light, Fuel & Power ating Black Hills Power & Light nding Futures on the Great Plains neasy Decade 972 sibility Down the Line egulation Clouds the Future gulation and the "New Economy" w Potential n the Horizon Minnow Swallowing a Whale" vigating a New World eGas Game Changers Chapter Fourteen: Growth Through Focus Conclusion: On the Energy Horizon

FOREWORD

We have exciting opportunities ahead to deliver long-term value for our customers and shareholders as we continue to profitably grow our expanded natural gas utility and vertically-integrated electric utility business.

We know our customers depend upon us to deliver the essential energy they need, and we work with great intention to fulfill our mission of "Improving Life With Energy." With this in mind, we are committed to being good neighbors, constantly striving to improve the communities in which we live and work. I am extremely proud of our employees who volunteer thousands of hours each year to make a positive impact in our communities and neighborhoods.

Behind Black Hills Energy is a team of talented and highly engaged employees who are dedicated to serving our customers. Our values guide our actions and hold us to the highest standards in all we do. These values include integrity, customer service, partnership, communication, agility, leadership, respect, creating value, and safety. Upon this foundation we continue to build a strong company.

As a third generation employee, I have seen this company through the experiences of my father, two uncles, and grandfather. I know the hard work and sacrifices they and their co-workers endured to make this company what it is today. We are indebted to those who have come before us for the opportunity we have today. With this opportunity comes the obligation to continue the progress and to make our company better for those who follow.

We're proud of our legacy. As our communities change, one thing doesn't — we are ready to serve.

REmy

David Emery Chairman & Chief Executive Officer **Black Hills Corporation**

FOREWORD

Beginning with the Black Hills Gold Rush, generations of families have relied on us. And we've been ready.

We were there when electric lights first lit up the night in Deadwood. We helped fuel a changing economy and experienced how the modern miracle of energy can change how we live.

Since 1883 energy has moved us forward. And it will shape the future.

This book commemorates the first 135 years of Black Hills Corporation. We have a proud history of change, progress, and growth through both good and challenging times.

As you'll see in the following pages, the common thread throughout our history is a timeless and tireless commitment to serve our customers and communities. Every service we provide and every utility investment we make is centered on doing what's best for each of our now 1.25 million customers and the communities in which they live.

At Black Hills Energy, we are focused on growth. Our acquisition of SourceGas in 2016 was crucial to our growth strategy and transformational for our business. This transaction significantly expanded the size and scope of our business, providing geographic, economic, and customer diversity across our eight-state service territory, while strengthening the balance between our electric and natural gas utilities.







The Wyodak Coal Mine and Generation Complex, 2017.

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Working in a power plant, 1981.



Pueblo Airport Generating Station, 2012.



Serving customers in the field, 2016.



Two line workers in southern Colorado, 2017.

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A natural gas meter in Iowa, 2011.



The Busch Ranch Wind Project, 2012.

EXPANDING THE ENERGY HORIZON

"And I saw the sacred hoop of my people was one of the many hoops that made one circle, wide as daylight and as starlight, and in the center grew one mighty flowering tree to shelter all the children of one mother and one father."

HEHAKA SAPA (BLACK ELK), OGLALA LAKOTA HOLY MAN

Soon after the miners on horseback arrived in the Black Hills, merchants followed. A determined entrepreneur believed that illumination would bring further investment in the community, spurring infrastructure and growth. Only four years after Edison's invention of the carbon filament incandescent lamp, the entrepreneur ordered the dynamo, the wire, the lights, and the globes to illuminate the rough frontier town of Deadwood. For weeks, he waited for the equipment to arrive. The system cost him a small fortune, and he had no idea whether he would even earn his money back — let alone lay the foundation of what would evolve into one of the largest companies in the state.

PROLOGUE

ILLUMINATING **THE FRONTIER**

PROLOGUE - ILLUMINATING THE FRONTIER

The blaze of light forced the curious to shield their eyes. The row of 15 bare bulbs burned so brightly that it was "as though the sun had taken position in one corner [of the building] at noonday." For Judge Squire P. Romans, the sight must have been exhilarating. Four years and nearly 1,800 miles from the scene of Thomas Edison's first successful demonstration in New Jersey in 1879, the electric light had come to the town of Deadwood in what was then called the Dakota Territory.

For months, Romans had been working to secure the right of way for electric lines, raise capital from investors, pre-sell service to merchants, and order the dynamo, wire, incandescent arc bulbs, and globes. To finance and coordinate this activity, he and two other Deadwood men — Colonel Pilcher and a Mr. Bower — had organized the Pilcher Electric Light Company of Deadwood on September 17, 1883 and put their own capital into the business.² Romans himself planned to invest \$15,000, or about \$375,000 in 2018 dollars.³

Reporters described this activity during the fall of 1883, raising expectations and inciting some skepticism. With a wire running from Mount Moriah to Forest Hill, one paper reported, "The dark valley of the Whitewood [will be] illuminated as with a midday sun." It then teased that the new illumination "is represented to be cheaper than moonlight."

Eager to counter these newspaper exaggerations with a practical demonstration, Romans was frustrated by shipping delays. Everything he ordered came by rail to eastern South Dakota, was then shipped over the Missouri River, and brought west by stagecoach to the Black Hills.

Most of the equipment had arrived by the first week of December. Poles had been set and the lamps were ready to hang. But the glass globes that would soften the brilliance of the bulbs had been delayed for weeks. Ice floes in the Missouri River made it difficult to ferry the cargo across. Packed "in a cask so large it was impossible to get it on a stage coach," the globes had to be repackaged for the rough journey across the prairie.⁵

Impatient, Romans had decided to show off the system without the globes. He and his crew set up the 40-horse dynamo and boilers in a building on Miller Street, then lined up 15 lamps in a row on one side of the building.⁶ An expectant Friday night crowd waited as the boilers roared in the background. When the engines fired, "the machine worked evenly and perfectly, and the light was simply dazzling."7

Awed by the seemingly magical new technology, merchants, miners, and townspeople showered Romans and his partners with congratulations. At the end of the 19th century, many Americans associated electricity's mysterious powers with spirits, believing it could be used to cure disease or summoned to produce light, heat, and fire. In some places, when the lights were turned on for the first time, crowds fell silent, thunderstruck by the transformation of the darkness.8

EXPANDING THE ENERGY HORIZON



Soon after his wondrous demonstration, Romans was "hard wood to the east and carried at work all the time putting in his electric wires." George equipment, like Squire Romans' Bews and James W. Allen, who ran a saloon, ordered a light for the front of their club rooms so the Faro players could see their cards and the eyes of the men across the table. bridges had been built. Another pair, Edward B. Wardner and Lee R. Baxter, ran a watering hole called "Ed's Place," which offered "fine wines, liquors, and cigars." They signed on for electric service to guide nighttime customers along the dirty wooden sidewalks to their store.⁹ Finally up and running by about Christmas, the new electric system proved unsteady. As one observer put it, the light was "very imperfect. It 'flickered' as though possessed, and finally expired." 10

Delays and technical difficulties underscored the risk that Romans and his partners faced. Immature, unreliable, and ever changing, the machinery and equipment necessary to produce and distribute electric power required inventors who sought more efficient and effective ways to produce and distribute electricity. Innovation consumed capital, and Romans was already looking for new customers and investors to keep the lights on. In a town full of gamblers, Romans and his partners had placed a very big bet, and the risk of failure loomed.

Large, flat-bottomed boats ferried electrical dynamo, to the west over the Missouri River in an era before any

PROLOGUE - ILLUMINATING THE FRONTIER



Over the next 135 years, Romans' business would grow and combine with dozens of other frontier, electric and natural gas companies across the Midwest, the American West, and parts of the South to form what came to be called "Black Hills Corporation." The culture of that company, colored by the values of the people who inhabited this region, emphasized innovation without fanfare, hard work for fair

Twelve years after the gold rush began, Deadwood's main street was lined with stores, hotels, and saloons. When the new smelter was completed in 1888, residents cheered as a parade marched through the center of town.

pay, a practical acceptance of government regulation in exchange for a fair profit, and a readiness to provide reliable energy that would serve as a catalytic force in thousands of communities in the heartland of the United States.

This book offers a history of the companies that formed the Black Hills Corporation of today. Known by many names over the years, these companies share a common heritage. Almost all are products of the settlement and development of the Great Plains and Rocky Mountain regions. Their histories reflect various transformations in the electric and gas utility industries and represent a broader story of corporate evolution — a process of constant adjustment and innovation that has allowed Black Hills Corporation to grow from modest roots into a leader in the regional energy industry.

From entrepreneurial beginnings, local utilities were engulfed by large, national holding companies. They regained their independence with the government-led breakup of these holding companies during the Great Depression. In the post-World War II years, they became vital to the regional economic development of cities in the heartland of the nation In the 1980s and 1990s, a tide of deregulation swept through the economy, titillating investors with massive success before market weaknesses created serious challenges. When the internet, telecommunications, and energy trading investment bubbles burst at the dawn of the 21st century, a new era of regulation and consolidation reshaped the energy industry. Over the next two decades, Black Hills Corporation would leverage the stability that had brought it through these major transitions into three major acquisitions and many smaller ones. It slowly divested itself of non-core enterprises while crystallizing a "back to basics" strategy to expand the company by recommitting to its core strengths as a utilities-focused, regulated energy provider.

People made this company. Entrepreneurs risked their own savings to launch businesses in small communities throughout the heartland of the nation, and corporate leaders took major risks to expand when opportunities arose. Workers from a wide variety of ethnic backgrounds built dams, hammered wooden flumes into place, fed furnaces, strung transmission lines, typed orders for parts, greeted customers, trimmed trees to prevent fires, walked neighborhoods to read meters, calculated rates to prepare bills, and extended help to neighbors in need. Generations of leaders imagined a better future for their communities. None of them were perfect, but their efforts contributed to the prosperity of their communities and helped Black Hills Corporation evolve over the course of 135 years. In that time, it has grown from a local power company into a multi-billion-dollar electric and gas utility that now serves 1.25 million customers in 800 communities in eight states.

The path was never easy.



Members of the Deadwood Railroad Engineers Corps posed with their surveying equipment in 1888. They laid out a new route through the Black Hills for the Deadwood Central Railroad.



The pan and shovel days of the gold rush were gone by the late 1880s. The Deadwood and Delaware Smelter was the largest reduction plant in the world when it opened. Gold and silver worth nearly \$2 million a year (approximately \$52.2 million in 2018 dollars) were melted from massive quantities of ore excavated by hard rock miners.

EXPANDING THE ENERGY HORIZON



"The incandescent system was inaugurated in this city yesterday and last evening the white inside lights were the object of admiration and attention..."

BLACK HILLS WEEKLY JOURNAL, APRIL 3, 1891

As gold miners exchanged the pan for a paycheck, electricity played a growing part in the economic development of the Black Hills. Ordinary citizens told tall tales to explain the miracles of electricity and took pride in each new streetlight. Mechanics and budding electricians struggled with the industry's ever-changing and non-standardized technology. Meanwhile, entrepreneurs lobbied frontier city councils for the right to provide electrical service to residents and businesses in the region's dusty towns.

CHAPTER ONE

of these new immigrants avoided the long-time residents of the Black Hills region: the Lakota people.

Having fought the United States Army to a standstill, leaders of several Lakota bands signed a treaty at Fort Laramie in 1868. Under its terms, the United States recognized Lakota claims to the western half of what is now South Dakota and promised to protect the region from white settlers. After a military expedition led by Lt. Colonel George Armstrong Custer discovered gold in the Black Hills in 1874, white prospectors entered the Hills illegally. Unable or unwilling to stem this flow of invaders, the United States had abandoned the terms of the treaty by the end of 1875.¹ Less than two years later, nearly 5,500 non-Native people filled the areas around Deadwood and Whitewood. Meanwhile, in other parts of the Black Hills, prospectors searched for bullion. In 1876 alone, miners extracted an estimated \$1.5 million worth of gold from the Black Hills (nearly \$35.3 million in 2018).²

Mercantile stores, lumber yards, and saloons sprang up to meet miners' demands for food, supplies, and entertainment. A city government formed after Deadwood incorporated on April 26, 1876, but the line between city and private business was necessarily thin. Deadwood's new mayor, Watson Parker, observed that E.B. Farnum, a local merchant, "was often seen seated on a sack of flour or flitch of bacon, dispensing justice and groceries with equal impartiality."3

Tents gave way to permanent structures. After a devastating fire in 1879, the town rebuilt. By the time Romans and his partners installed their electric lights, Deadwood could brag about its retail establishments and accommodations. As saloons courted patrons and placer miners emptied the streambeds of gold, prospectors increasingly turned to hydraulic and quartz mining. These new techniques required more equipment, labor, and capital. They also needed power and light.

The ability of unseen forces to generate light and to perform work had long fascinated the human imagination. The ancients speculated on the power of the wind. Galileo and Newton described the force of gravity. By the mid-18th century, experimenters like Benjamin Franklin were fascinated with the properties of electricity. After Michael Faraday discovered the principles of electromagnetic induction in 1831, inventors began to look for ways to harness the power of electricity for the benefit of mankind.

Popular culture gives Thomas Edison the credit for inventing the first practical electric light bulb in 1879, but like many innovations, the electric light represented both collective work and individual inspiration. Between 1806 and 1878, various inventors created more than 20 different incandescent lamps. All failed after relatively short use. Edison experimented briefly with incandescent lamps in 1877, but turned his attention to developing the phonograph that autumn. Over the next six months, his time was devoted to perfecting

3663 Achilly base pat an Indian Find To some Deadwood residents, the arrival of the electric light pro-With the Black Hills gold rush, the U.S. Army abandoned efforts to keep vided evidence of the town's transition from a rugged frontier Americans out of Lakota treaty lands. camp to a stable and growing community. Deadwood Gulch By 1891, most Lakota families had was filled with tents by the end of 1875, just months after rich deposits been forced to live on reservations. of gold were discovered in the waters feeding Whitewood Creek. Miners rushed from western states; midwestern farmers fled their failing, grasshopper-plagued fields; and factory and railroad workers from the nation's economically depressed cities all rushed to pick the mountains and pan the streams of the Black Hills.

Some rode the transcontinental railroad to Sidney, Nebraska or to Cheyenne, Wyoming and then came north to the Black Hills on horseback. Others traveled overland from the eastern half of Dakota Territory or from Sioux City. Fortune seekers floated up the Missouri River to Fort Pierre in large riverboats then journeyed west over the prairie. Most



Path of the Spark

CHAPTER ONE - DEADWOOD

the phonograph and exhibiting the machine to astonished audiences. After a trip to Wyoming and the West in the summer of 1878, Edison returned to working on the incandescent lamp. Perhaps borrowing from his work on a tasimeter to measure the sun's corona, Edison focused on developing a circuit-interrupting device to prevent the lamp's filament from burning out. He also studied ways to develop systems to illuminate a series of lamps. Excited by his progress, he prematurely announced his ideas to the world in October 1878 before he had perfected a long-lasting incandescent lamp. His concept was ridiculed by some. Returning to his lab, Edison and his team continued their experiments for another year. Finally, in October 1879, Edison tested a high-resistance carbon filament that lasted nearly 15 hours. Within a year, Edison's lab had improved this technology, implementing a carbonized bamboo filament in bulbs that could burn for a lifespan of nearly 1,200 hours.⁴

Edison's genius lay not only in the development of a longer-lasting light bulb, but also in the creation of a system for generating and distributing electric power that could illumi-

nate buildings, neighborhoods, and even entire cities. He introduced an improved "dynamo," or generator, the same vear he produced a lasting incandescent lamp. In October 1878, he and a group of business partners formed the Edison Electric Light Company to fund his continuing research

The incandescent bulb provided a softer, more gentle light. It guickly became popular in homes and offices where the nightmare light produced by arc lamps was impractical.

and, two years later, incorporated the Edison Electric Illuminating Company of New York. The goal of that entity was to build and operate a central generating plant that could provide power for lighting businesses and homes in New York City.⁵

Competing technologies shaped the development of electric power, as was the case in many young industries. Edison's first systems relied on direct current (DC), which was unreliable for transmission over long distances. The Serbian-American inventor Nikola Tesla designed a system based on alternating current (AC), which used transformers to "step up" the voltage as it left the plant, then "step down" when it reached its destination. This technology enabled a single power plant to serve multiple users across a wider geography and allowed entrepreneurs to build bigger power plants that would benefit from economies of scale. In 1892, the battle between DC and AC technology seemed to

FISHING POLE AND FILAMENT IN WYOMING



Worn out from his research and public speaking in 1878, Thomas Edison decided to take a vacation in Wyoming to witness a solar eclipse. He rode the same railroad used by gold seekers headed for the Black Hills. After the eclipse, he joined a group of men on a hunting and fishing expedition. Near Battle Lake, someone accidentally knocked a fishing pole in a campfire. Noting the bamboo's resistance to the flame, Edison made a mental note.

After he returned to New Jersey, Edison experimented with carbonized bamboo filaments for his incandescent lamp. He discovered that they lasted more than 1,200 hours.

Following the success of his light bulb, Edison continued to innovate. He envisioned the creation of power stations to provide electricity to communities. He built the nation's first central station on Pearl Street in New York. Power from a half dozen steam-driven dynamos lit an entire neighborhood.



end when Edison merged his company with a power company called Thomson-Houston, which was a leading advocate of alternating current technology. The combined entity was called the General Electric Company.⁶

Edison, Elihu Thomson, and others recognized that with the invention of electric light came a need to develop a dependable system for generating and distributing electric power. Rather than establishing these systems themselves, they encouraged entrepreneurs in communities across the country to form electric utility companies. Edison and Thomson then sold power-generating equipment to these shareholder-owned utilities.⁷

Power Proliferates in the Hills

Squire P. Romans and his partners hoped to develop a power company that could serve the growing communities of the Black Hills. They employed an Edison dynamo. Just weeks after the first demonstration of their electric light system in Deadwood, however, Romans announced that he and his partners had reached an agreement to reorganize the business with a new group of investors. These investors promised a company that would "introduce

lights into all the towns and cities of the Hills and possibly in many of the mines." ⁸

With the new partners came a new name — Black Hills Electric Light Company — and in January 1884, the *Black Hills Daily Times* reported that the company would sell as many as 8,000 shares at \$1.50 each to raise working capital.⁹ The company intended to continue upgrading its system with these funds. Romans then left the Black Hills for a twoand-a-half-month trip to the East Coast, where he investigated various electric lighting systems.¹⁰



But if Romans and his partners hoped to quickly dominate the growing market for electric service in the Black Hills, they were soon disappointed. In the central room of the Pluma Plant in 1910, employees monitored the temperatures and pressures inside the boilers and steam turbine generators.

Other electric service pioneers planned, and a few

launched, similar businesses throughout the Black Hills. Along with a dozen investors, a former miner and rancher named Henry Keets created the Black Hills Traction Company in 1894. This company planned to build a dam and hydroelectric plant on Redwater Creek to power a trolley that could serve Belle Fourche, Spearfish, Deadwood, Whitewood, and

St. Onge. The trolley never materialized, but the hydroelectric plant was completed in 1907. Keets and his partners supplied energy to the mining industry instead. Another group of investors organized the Belt Light & Power Company in Lead in 1893. Constructing a steam plant in Pluma, the group wanted to run a direct current trolley between Lead and Deadwood while lighting the city of Lead. By 1904, this plant powered the Black Hills mining communities of Lead, Pluma, Central City, and Terry.¹¹

As entrepreneurs launched power companies across the northern Black Hills, Romans and his partners looked south to Rapid City, which had been founded on the eastern edge of the Black Hills in February 1876. First called "Hay Camp" and commonly known as the "Gate City," the community began as a stop for stage coaches and oxen-pulled freight trains. Through "the gap" in the foothills at Rapid City, a web of roads from Pierre and Sidney, Nebraska converged at the entrance to the Black Hills.¹² By 1885, Rapid City had grown to 2,500 people.¹³ When the railroad arrived a year later to connect Rapid City with Chadron, Nebraska, commercial buildings and homes sprang up across town, stoking the need for water, sewers, fire protection, and power.

In February 1886, Romans went to Rapid City hoping to convince municipal leaders to give the Black Hills Electric Light Company a franchise. The *Black Hills Daily Times* predicted he would be successful, noting that "for whatever else the citizens of Rapid may be deficient, they certainly do not lack enterprise." The newspaper was sure the community would follow Deadwood's lead in the move to electric light.¹⁴

Romans and his partners were not the only entrepreneurs interested in meeting Rapid City's lighting needs. City business leaders and residents debated the relative merits of electricity versus natural gas. Residents conceded that electricity was better for street lighting: gas lamps had to be lit every night and their flames could blow out in a high wind. Worse yet, the lamps turned black with smoke and had to be cleaned frequently.¹⁵ In the home, gas light was also less effective and more dangerous.¹⁶ Most household gas or kerosene lamps emitted only enough light to equal the output of seven candles. They also burned up oxygen and emitted heat, making rooms uncomfortable on a summer night. And worse, if a flame blew out, a room could fill with gas and explode. Although electric lights did not share these disadvantages either in the home or in public spaces, they faced



Before cooling towers had been developed at the Pluma Plant, the hot water from the steam vented through the generators was sprayed over a pond beside Whitewood Creek.



To provide the first electric power in Rapid City, a dam was constructed on Rapid Creek near the foot of "M" hill. Water from the dam flowed through an open flume to a crude hydroelectric plant just off Oshkosh Street. an arguably steeper challenge: price. Most buildings and homes were not wired for power in the 1880s, and the high price of electricity made gas more attractive to most residents.¹⁷

The debate continued until August 1886, when the city council awarded a franchise to the newly formed Rapid City

Light & Gas Company, which was owned by Romans and his partners.¹⁸ Under the terms of the franchise, the council reserved the right to regulate the price and hours of service. The company ordered a 45-light incandescent system and a dynamo from Thomson-Houston. They planned to install the dynamo at one of the mills in town where there was already an engine that could power it.¹⁹ "This is a great step forward in the history of Rapid City," the *Black Hills Journal* exclaimed, "and naturally follows in the wake of such improvements as the railroad, the water works and the street cars." The newspaper proclaimed that visitors arriving in the railroad's new palace cars would be "whirled in carriages or drawn by in street cars over graveled streets" and would "gain a much different impression than did those who came in the stage last spring."²⁰

As workers erected poles and strung wire, locals eagerly looked on. People chatted about electricity — or, as one journalist called it, the "subtle fluid" — all over town. Yet few understood it. "While there is a great deal of talk," one piece mused, "it is an open question as to whether or not the parties talking know anything of the subject in hand." These sidewalk scientists asserted that electricity was responsible for everything in nature "from earthquakes to spots on the sun's face," but few truly grasped the underlying science.²¹ Others did not care as long as the street lights worked at night.

The system failed at first. In the early days of November, citizens were "disappointed from night to night" as the lights flickered and the disappointment "became monotonous." Finally, in the darkness of November II, "the circuit was made…and, for the first time, the bright, white light of the electric lamps blazed forth to put to shame the yellow blaze of the coal oil lamps."²²

To meet the city's long-term power needs, Rapid City Light & Gas Company built in the northwestern corner of town a combination water power and steam plant, which started delivering power to customers in 1888.²³ Damming Rapid Creek near the foot of "M" hill, they backed the water up for a half mile and made a beautiful lake. The water flowed through an open flume to the plant just off Oshkosh Street. Power from the water wheel drove a line shaft with three belt wheels that powered generators. Direct current from these generators flowed to arc lights along the streets and in larger stores with high ceilings to illuminate the night.²⁴

Solving the Problem of Distribution

In the industry's early years, power generation was necessarily local. It was difficult to transmit electricity from point to point, and through most of the 1880s, producers relied on direct current technology, which could only be transmitted about a mile from the generator. In 1889, Lucien L. Nunn, a Colorado mine owner, developed an alternating-current, hydroelectric generator that could transmit power over much greater distances.

The first "long distance" power lines in the United States were installed that year at a hydroelectric facility operated by the Willamette Falls Electric Company in Oregon. The first line ran 13 miles and carried 4,000 volts. A year later, the San Bernardino Light & Power Company in California constructed a 28-mile, 5,000-volt line.²⁵ Two years after that, transmission took another leap forward. The first three-phase transmission lines were introduced, increasing available power to 15,000 volts.²⁶

Long-distance transmission accelerated the move to larger, more-centralized power plants. Standardization helped the electric industry expand, and the success of alternating current technologies sped the development of electric motors for industrial and domestic applications. By 1910, households across the country were using alternating current, generated at 60 cycles per second, stepped up to higher voltages during transmission, and then stepped down for delivery to homes and businesses.²⁷

EXPANDING THE ENERGY HORIZON

Power and the Search for Gold

In the Black Hills, men working with picks, pans, and sluices in shallow surface mines had found most of the easily available gold in the Deadwood area by the 1880s. Entrepreneurs and investors deployed industrial equipment and opened hard rock mines throughout the region. The first of these underground shafts was illuminated with candles, but companies quickly transitioned to electric lights. Indeed, electricity soon permeated all aspects of modernized mining operations.

The Homestake Mine in Lead was both the most successful and the most important to the history of electricity. The Manuel brothers filed the first claim on the Homestake in April 1876, but sold it to San Francisco mining entrepreneur George Hearst the following year. Hearst understood industrial mining, having already made a fortune in the



Equipment on the cam floor of the Gold Star Mill operated by the Homestake Mining Company. The first dynamo on Homestake property was installed in this mill in 1888 to power 75 lights.

Comstock silver mines of Nevada. He had also developed mines in other parts of the West. Hearst and his partners incorporated the Homestake Mining Company in San Francisco on November 5, 1877, and soon the company began investing in equipment and infrastructure.28

As the potential uses of electricity became apparent in the 1880s, Hearst and his partners incorporated this new technology in their operations. Hearst purchased an Edison dynamo to provide power to 75 lamps in the Star Mill in Lead during the winter of 1888.²⁹ Toward the end of the 19th century, the Homestake and other gold

mines also began to look at using electric power to drive the stamp mills that crushed the ore. A hydroelectric plant built at Englewood powered a generator that delivered 300 to 400 kilowatts (KW) to drive two stamp mills at Monroe and Mineral Point.³⁰ Some mine operators doubted the utility of electric power in this era, but the success of the Englewood

plant changed their minds. Except for occasional outages caused by lightning strikes, the hydroelectric facility delivered a more dependable source of power than the coal-fired engines used at the time. Seeing success at Monroe and Mineral Point, Homestake began to use electric motors at the Slime Plant in Deadwood. Over the next several years, the company installed electric drives in its regrinding plant, pattern shop, and foundry. The



Pocahontas Mill was switched to electric power when the boilers started to wear out. In 1910, the two cyanide plants were also converted to electric motors.³¹

As Homestake's need for electricity increased, it looked to develop a reliable source of power. Rumors ran rampant as early as November 1899 that the company was buying water rights on Spearfish Creek "to put in a gigantic electrical plant" that would furnish power to its stamp mills in Lead and provide power "for the whole Black Hills country." According to the Wall Street Journal, electric power would lower Homestake's mining costs and make a number of mines in the region profitable.32

This Homestake train carried ore from the mine to the stamp mills where it was crushed. The first locomotives were wood-burning machines.

The rumors were true. In 1907, Homestake started developing plans for the Spearfish Canyon plant and began construction two years later. When the plant was brought into service in April 1912, the company converted its three stamp mills in Lead to electric power. The supply of electricity from Spearfish satisfied Homestake's demand, leaving the company free to operate without additional power supplied by the Belt Light & Power Company of Lead.33



Homestake continued to rely on Belt Light & Power to provide auxiliary power for several years, particularly when water in Spearfish Canyon ran low. Soon, however, the company built its own central, steam-boiler plant and steam-turbine power station in Lead. In 1913, Homestake also converted its pumping operation to electric power.³⁴ By the 1910s, Homestake had one of the largest and most sophisticated power-generating operations in the Black Hills.

Expansion and Uncertainty

By the turn of the century, as European immigrants poured into eastern cities and Chicago swelled with factories and stockyards, the Black Hills economy still depended on the wealth produced by the mining companies. Rapid City suffered from a prolonged drought and economic depression in the 1890s but slowly recovered late in the decade. In 1899, the *Journal* proudly noted that Rapid City was home to a growing number of industrial enterprises, including the world's largest chlorination plant, capable of processing 150 tons of gold ore each day. Adjacent to the 12-year-old South Dakota School of Mines, two large, water-powered mills supplied the residents of the community as well as two Indian agencies with flour. In another part of town, a large manufacturer produced bricks for buildings and homes.³⁵ While Rapid City grew, northern Black Hills communities continued to prosper. Per capita bank deposits in Deadwood were 2.5 times the national average in 1904.³⁶ Together, Lead and Deadwood accounted for nearly 17,000 residents by 1908.³⁷ Many of these residents and businesses demanded electric power.

Inside the Terraville mills between Lead and Deadwood, Homestake Mining Company workers cleaned up the dust and debris from hours of stamping and crushing.



By the early years of the 20th century, small systems for generating and distributing electric power had been built around the Black Hills. Costs were high, while the number of consumers remained relatively low. Government regulation was local; cities held the power to grant or withhold a franchise, sometimes on the condition that the city reserved the right to set prices. Expansion depended on continuing technological innovation as well as the development of more uses for electricity.

The construction of electric power systems, along with railways, water works, and other public infrastructure, signaled the permanence of white settlement in western South Dakota. But permanence didn't guarantee prosperity. Far from the growing industrial cities to the east, small town and rural residents alike experienced booms and busts in mining and agriculture over the next several decades. Some predicted the region would never overcome its isolation. Foolhardy souls who invested hard-earned capital to generate and provide electric power, the thinking went, would go broke before they ever earned a decent return on their investments — unless someone came along to buy them out.

Fred Evans advertised his "plunge bath" in Hot Springs as the largest in the United States when this picture was taken in 1891. Visitors arriving by rail to spend time at the spa helped make tourism an important part of the Black Hills economy.

EXPANDING THE ENERGY HORIZON

As Americans discovered the marvelous ways in which electricity could be used, household and industry demand skyrocketed. Improvements in transmission engineering enabled a transformation in power generation. Small, local plants were replaced by larger facilities requiring more capital. Savvy entrepreneurs tapped financial markets in Chicago and New York. From these investments evolved a series of regional, and then national, power companies whose services would soon reach frontier communities on the Great Plains.

"Everyone had faith in the future, believing the entire area would be filled with homes in the next few years."

GEORGE MANSFIELD, GENERAL MANAGER, DAKOTA POWER COMPANY

CHAPTER TWO



The turn of the 20th century brought continued developments to the technology of power generation and transmission, and the electric industry grew dramatically across the United States. While smaller power companies struggled to earn a decent return, entrepreneurs with access to national capital markets founded holding companies and began consolidating power generation into larger, more efficient plants. They flourished under a limited and benign regulatory structure.

Consolidated businesses delivered operational efficiencies and lower costs, but they posed risks to investors and customers. Speculators often gained control of young utility companies and destabilized management during the transition. Some investors who bought shares in these holding companies — many of which bought and sold utilities very quickly lacked a clear idea of the value of the underlying assets or the strength of these businesses. Meanwhile, customers struggled to find accountability when they sought reliable service and attention to the needs of a local market. Far from Wall Street, customers and power company employees in South Dakota felt the impact of the national consolidation trends.

Consolidating Power in the Northern Black Hills

In the Black Hills, this movement toward consolidation was led by two new, local entities: Consolidated Power & Light Company and Dakota Power Company. Between 1905 and the late 1920s, these businesses gradually acquired all of the independent electric operators in the region.

Companies in the northern Black Hills were the first to come together. In June 1905, the Belt Light & Power Company of Lead and the Black Hills Electric Company of Deadwood merged to form Consolidated Power & Light Company of South Dakota.¹ Despite its name, Consolidated Power & Light was actually a Wyoming corporation. Three years later, this company dissolved, and its assets were transferred to a new business which had the same name and was incorporated in Maine.²

Consolidated Power & Light was initially managed by Harris Franklin.³ Franklin, born Finkelstein, was a lewish immigrant from Poland who came to the United States as a teenager at the end of the Civil War. He made a fortune investing in saloons, hotel rooms, cattle, and banking during Deadwood's earliest days. Yet, at the time of the creation of Consolidated Power & Light, he was nearing the end of his sojourn in Deadwood. Widowed three years earlier, he remarried in 1905 and moved to New York, leaving his son, Nathan, to succeed him on the board of Consolidated Power & Light.⁴

Nathan Franklin expanded the company's reach in June 1910 when he orchestrated the purchase of the Black Hills Traction Company and the stock of Black Hills Water & Power Company for \$538,342.5 Black Hills Traction's assets included a canal that ran water from Crow Creek and Redwater River via a wooden flume to a power house near Spearfish, where the water turned two 1,000-horse power turbines connected to a 500-KW, threephase, 6o-cycle Westinghouse generator.6

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Consolidated expanded again, buying the Belle Fourche Electric Light, Heat & Power Company for \$50,000 on April 25, 1912.⁷ A disastrous fire had nearly ruined the company, leaving its owners eager to sell.⁸ The Homestake Mining Company's Spearfish plant was next. The City of Spearfish had agreed to allow the construction of Homestake's was never built. hydroelectric plant (completed in 1911) in exchange for the company's commitment to supply a new system of incandescent street lights. In 1915, Homestake decided to sell its interest in the Spearfish Electric Light & Power Company to Consolidated for \$35,000 but retained the hydroelectric plant to power its own operations.9

With most of the leading communities of the northern Black Hills integrated into the company's operations, Consolidated lacked only the town of Sturgis, where the first power plant had been built by J.A. Ward in 1896. The plant changed hands several times over the next ten years, with each new owner adding new equipment. The company's

The Redwater hydroelectric plant was completed in December 1907. Located near the junction of Crow and Redwater Creeks in the northern Black Hills, the plant was intended to power an electric trolley running from Belle Fourche to Deadwood. The trolley line

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most important customer was Fort Meade, a nearby army outpost, but it also powered the volunteer fire department's innovative electric alarm system.¹⁰ In 1916, Consolidated completed its buying spree by acquiring the Sturgis Light & Power Company for \$32,650.¹¹

When this integration was complete, Consolidated served a total of just over 32,000 people in three counties. It had offices in Deadwood, Belle Fourche, and Spearfish, and although the customer base was not large, they reliably paid their bills.¹² Under Franklin's leadership, the company's net income had grown — from \$105,159 in 1908 to \$176,915 in 1915 — as had its invested capital.¹³ Earning an adequate return on that capital, however, continued to be a challenge, as did a new competitive threat in the central Black Hills.

Flume Provides Power for Rapid City

Louis Richards and his partners had hoped to get rich in 1904 by blasting the hillsides along Rapid Creek. They built a wooden flume and dam to channel water to their hydraulic cannon, and as mud gushed down the hillside, they sluiced it for gold. The operation

was never very profitable. In 1907, Richards invited George Mansfield to see if he could devise a more lucrative venture.¹⁴

At 53, Mansfield represented the transition from frontier entrepreneurship to stable commercial success. Born and raised in New Haven, Connecticut, he moved west in the 1870s to Chicago, where he worked in the wholesale grocery industry. When his firm needed someone in Rapid City in 1883, he relo-



cated and married a local schoolteacher, thereby deepening his connection to the community.¹⁵

"Everyone had faith in the future," Mansfield later wrote, "believing the entire area would be filled with homes in the next few years." Inspired by the enthusiasm of local boosters, who predicted that Rapid City would become "the Denver of the Black Hills," Mansfield invested with a num-

ber of leading businessmen in a street railway company. With a city-approved franchise, the partners laid tracks down Main Street from the Hotel Harney to the South Dakota School of Mines. For "motive power," they employed "an old white horse."¹⁶

In 1901 electric cars replaced a steam locomotive on the light rail that ran between Lead and Deadwood. The Belt Light and Power Company of Lead converted 11,000 volts AC to 600 volts DC to power the Burlington inter-urban trolleys. The company produced the power at the Pluma plant.



The street railway did not make Mansfield a fortune. In 1886, he left to work for a wholesale hardware store in Iowa, returning to Rapid City four years later to launch a real estate and insurance agency. His timing could not have been worse. A regional drought and national depression inspired an exodus from the Black Hills. Between 1890 and 1900, Rapid City's population declined from 2,128 to 1,342.¹⁷

Struggling financially, Mansfield still found time to serve on the city council. He was elected mayor in 1898, but his salary of \$1 a year didn't support his wife and family, so Mansfield moved his family to Mexico City, where he took a job with an American mineral company. "We realized a great mistake had been made in bringing the children to that country," Mansfield later wrote. Soon, the family returned to the Midwest. After a brief tenure at a furniture factory in Michigan, he came back to Rapid City to work for the Tom Sweeney Hardware Company, one of the largest mercantile stores in South Dakota.¹⁸

Mansfield accepted Louis Richards' invitation to evaluate his mining operation in 1907. With water pouring from the flume "like a young Niagara," Mansfield suggested that the operation could be used to generate electric power. Although neither he nor Richards "knew the first thing about electricity, except that it was used for power and lighting and that there was a tremendously growing demand for it," the two men recruited several local businessmen to join them.¹⁹

The wooden flume that carried water to the Big Bend Power Plant followed a five-mile route along Rapid Creek. It was built by hand using hundreds of laborers.

In March 1907, "in a sky-lighted room in the Security Bank Building," the men organized the Dakota Power Company. John C. Haines, who owned a building and dry goods store diagonally across from the Franklin Hotel in Deadwood, was elected president. Mansfield became secretary-treasurer and Richards was the general manager.²⁰

Dakota Power began acquiring water rights on Rapid Creek, purchasing some and exchanging others for shares in the new power company, which had obtained a 20-year franchise from Rapid City.²¹ After the organization gained control of the water rights from the community of Pactola to Scott's Dam, which was located six miles above Rapid City, the owners were ready to make their move.²²

On March 20, 1908, they purchased the water rights, ditch, and flume from Richards' mining company and converted them into a hydroelectric plant.²³ According to Mansfield, "a large force of engineers and mechanics were at once set to work" extending the flume, excavating the side hills, building trestles, and digging a 700-foot tunnel.²⁴ In addition to a large amount of grading and rock work, the crews cut and prepared about 400,000 feet of lumber.²⁵

These were hard years to be engaged in a massive, capital-intensive project. A nationwide depression began in 1907, making it difficult to raise capital. The company had originally issued \$100,000 in first mortgage bonds but nearly ran out of money several times. Rumors circulated that the company was in financial distress. Mansfield and the other officers feared what might happen if they could not make payroll. Some of the men, he said, "were tough and could not be reasoned with." More than once, Mansfield, a relatively small man, was "threatened by some big, husky flume worker with annihilation."²⁶

By July 4, 1910, the project was still not complete. On Independence Day, Mansfield, Judge Levi McGee, W.R. Putnam, and their families picnicked at the "Big Bend" along Rapid Creek. While the women prepared the food and some of the children fished in the stream, the men "lolled in the shade of a big pine tree." With the sound of the rushing water in the background, they made plans to construct a new, 2,000-horsepower hydroelectric plant to be powered by water from the flume.²⁷ They also talked about ways to satisfy increasingly impatient city officials.

To avoid losing their franchise, the Dakota Power officials decided to quickly build a steam power plant in Rapid City, which would allow the company to begin delivering power while they worked to complete the hydroelectric facility.²⁸ With an aging and inefficient plant, Rapid City Light & Gas unsuccessfully tried to thwart these efforts, but after Dakota Power fired up its new, 400 KW plant near Halley Park in July 1910, Rapid City Light & Gas quit rather than face the competition. In December 1910, they sold out to Dakota Power, accepting a note for \$90,000.²⁹

As they built the Big Bend Plant, Mansfield and others at Dakota Power realized they faced a host of challenges. In the dead of winter, the freezing Rapid Creek slowed to a trickle.

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Advertisement from Paha Sapa Quarterly, published by the South Dakota School of Mines.

Slow flows also plagued the driest summer months. In 1909, Dakota Power had proposed building a dam to contain the water and release it evenly throughout the year. To justify its cost, the company needed to maximize its potential. After acquiring additional water rights between Pactola and Big Bend, Dakota Power also proposed in 1909 to build two plants along the creek, one below the other, with a fall of nearly 500 feet at each plant.³⁰

As the Big Bend project neared completion in 1912, Dakota Power ambitiously purchased three turbines from the S. Morgan Smith Company in Pennsylvania but often had only enough water to supply one of them. Power generated by the plant traveled ten miles to Rapid City over transmission lines stretched between steel towers.³¹ But in winter, the plant had to be shut down completely because the flow line froze.³²

Although Consolidated Power & Light Company in the northern Black Hills dominated the regional electric industry for the first years of the 20th century, the company agreed to help Dakota Power by interconnecting their systems. In 1910, the companies built a 26,000-volt line from Pluma to Rapid City, allowing Consolidated to provide power to Dakota Power when low water flow limited Big Bend's production.³³ This system also allowed Dakota Power to provide electricity to the northern Black Hills during periods of peak summertime demand.34

Dakota Power's economic picture remained grim even as it built and merged. During these hard times, Dakota Power's president, John C. Haines, spent weeks in New York selling bonds to keep his company's construction project moving forward. By the time the work was complete, the company was capitalized at \$1 million but had issued half that amount in bonds.³⁵ To afford this debt, the company cut salaries and deferred payments on the note given to the owners of the Rapid City Electric & Gas Light Company. Crisis loomed.

When the final balloon payment to the previous owners came due, it prompted a stark realization for the leaders of Dakota Power. "There was no money in the treasury," Mansfield wrote, "and no prospect of raising the money in time." Failure to make the payment would mean the property would be returned and all previous payments forfeited. Haines saved the day by taking out a loan on his personal credit, but the company's finances still did not improve.³⁶

In 1913, the company failed to make its payments to bondholders, and several locals threatened to take the company to court to have a receiver appointed. Other investors stepped forward to purchase these bonds, and interest and principal payments on them were deferred from 1913 to 1918.³⁷ But in 1918, East Coast investors sent lawyers to South Dakota to encourage the company into receivership. Instead, with close to \$500,000 in first mortgage bonds outstanding, Dakota Power struck a deal reorganizing its financial structure. Existing bondholders received new bonds and preferred stock in lieu of their accrued interest. With new running room, Dakota Power's finances and operations finally improved. Stable revenues and solid earnings enabled consistent and prompt debt payments over the next five years. In the meantime, however, the company faced a new competitive threat.

COAL FUELS THE SEARCH FOR GOLD



The construction of the transcontinental Pencil drawing of the Wyodak Mine by employee railroad created a need to mine coal in Halver Johnson. Wyoming. Steam locomotives burned coal to heat their boilers. Wyoming had an abundance of coal. First mined along the route of the railroad in the southern part of the state, it was discovered in the Powder River Basin before the end of the 19th century. Eventually, geologists would determine that the Powder River Basin contained the single largest source of coal in the United States.

When Homestake Mining Company began operating a central steam-powered electric generating plant in 1916, it faced a critical need for fuel. Looking for coal beds located close to an existing railroad, Homestake acquired the Wyodak properties just east of Gillette in 1921.

In the early days of the mine, workers used horses and a scraper called "fresno" to remove the dirt or "overburden" on top of the coal. It was tough work. Production was limited at first. In 1925, Wyodak crews produced just 33,579 tons of coal. With the increased use of machinery, however, production rose to 72,749 tons by the end of the decade. This increased production allowed Homestake to increasingly rely on coalfired steam generating electric plants to produce the power it needed for its gold mining operations in Lead.

EXPANDING THE ENERGY HORIZON

Damming the Rivers

In the early decades of the 20th century, Americans debated the idea of public ownership of utilities like water, power, transit, and telephone. In the West — where water was scarce and dams were needed for flood control, irrigation, and growing cities — dam building

and hydroelectric development went hand in hand, along with pressure for public ownership and operation of these facilities.

When the United States entered World War I in 1917, the government mobilized troops and the private sector. Congress authorized President Woodrow Wilson's administration to take over the management of the nation's railroads and telephone and telegraph systems to coordinate the movement of goods and soldiers. When the war ended, the government returned these systems to stockholders, but the campaign for public ownership continued.

In South Dakota, gubernatorial candidate Peter Norbeck had promised in 1916 to promote various state-owned enterprises, including a coal mine, grain elevators, and hydroelectric power generators on the Missouri River. After he was elected, South Dakota voters approved constitutional amendments providing for state hail insurance, a state-owned cement plant, and a state-owned hydroelectric project.³⁸ When the war ended, the South Dakota legislature created the Hydroelectric Commission to investigate the idea of damming the Missouri River to install hydroelectric plants.

The movement stalled after the commission's engineers expressed concerns that the South Dakota power market was too small to justify spending more than \$16 million for a dam and power plant. The idea of public power, however, did not die with the commission's report.³⁹

A Growing Demand

Although it may not have been sufficient to justify damming the Missouri River, the demand for power was growing in the Black Hills and across the country. By 1917, electricity provided one third of the nation's industrial power, a percentage far greater than in any other nation. Nearly half of all urban dwellings had electric lights, although most farm families still burned kerosene lamps.⁴⁰

Meanwhile, inventors were busy developing new uses for electricity. Refrigerators, vacuum cleaners, curling irons, and radios — all of which topped the list of new household

Running for governor in 1916, Peter Norbeck promoted the idea of public power generation in South Dakota. He proposed the construction of a hydroelectric dam on the Missouri River.

Governor Norbeck also proposed the construction of a state-run cement plant in Rapid City. The plant became a major consumer of electric power after production started in 1924.



Westinghouse Type C 1906-1911. The first known patent for an electric meter was issued in 1872. While the look of the basic meter has evolved, the function remains the same: to measure the use of power. appliances in the 1920s — required electric power. By the end of the decade, new and improved electromechanical thermostats enabled electric stoves to compete with gas ranges and sparked the development of electric toasters, irons, and hot water and space heaters.⁴¹ By 1933, appliances accounted for nearly 60 percent of the electric power consumed by households in the United States, compared with only 35 percent in 1926.⁴²

Electricity quickly came to be associated with everything that was modern. Not everyone, however, had access to the "good life." Like most network industries, electric utilities needed economies of scale to develop and thrive. In rural communities, the developing electric industry struggled to attract entrepreneurs and capital. Erecting lines to carry power to sparse for shareholder-owned cost to build and maintain ibution systems was far too ies and farmers to bear. As can farms still did not have

settlements was too expensive for shareholder-owned companies.⁴³ Meanwhile, the cost to build and maintain electrical generation and distribution systems was far too expensive for rural communities and farmers to bear. As a result, nine out of ten American farms still did not have access to electrical service in the late 1920s.

Farmers in rural, western South Dakota and Wyoming were among those left behind. Farmers who could afford it installed their own power generators, while in some small towns, a lone entrepreneur might invest in a gasoline- or kerosene-fueled engine, attach a dynamo, and begin offering electric lighting to downtown merchants. Lacking economies of scale, these entrepreneurs often could not sustain their businesses.⁴⁴

In the Black Hills, new industrial enterprises contributed to the rising demand for power. In 1924, South Dakota opened its state-owned cement plant in Rapid City.⁴⁵ Although the population of the city continued to grow, the total electrical load in Rapid City was less than 1,000 KW in 1929.⁴⁶ In other parts of the country, electric service was big business.



Available to consumers as early as 1910, curling irons relied on electric resistance coil technology, the same concept used for irons, toasters, and kettles. One 1927 survey found that the average rural home had three electrical appliances, and nearly half had electric curling irons. In 1926, only about 35 percent of electric usage was for appliances. By 1933, that amount had increased to 60 percent.

Giant Utilities on the Rise

The success of the young electric power industry led to financial speculation and an effort by various empire builders to create national companies. By 1924, just 20 holding companies controlled 61 percent of the total generating capacity of the United States.⁴⁷ Trading these companies' stocks fed the Wall Street boom often associated with the Jazz Age of the Roaring 20s.

The Black Hills was not immune to this wave of consolidation. In 1923, a group of Chicago bankers took over Dakota Power Company and then sold the company to an investment group in Philadelphia several years later.⁴⁸ Five years after that, the company changed hands again, this time to a large regional holding company named General Public Utilities Company (which was in turn owned by a larger, Florida-based holding company called Community Power & Light).49

Under the direction of distant corporate executives, Dakota Power continued to consolidate electric operations in the central and southern Black Hills. In January 1928, the company acquired the assets of the Custer Electric Light Heat & Power Company for \$22,000.50 General Public Utilities completed this regional integration in 1934, purchasing Consolidated Power & Light in the northern Black Hills. With this move, the ownership and management of virtually all of the region's electric service operations were in the hands of executives and shareholders who were far from the Black Hills of South Dakota.

Government Regulation Grows

The consolidation of economic power had unsettled the American public since the rise of the railroads in the 19th century. Passage of the Sherman Anti-Trust Act and efforts by President Theodore Roosevelt at the turn of the century led to the breakup of large monopolies like Standard Oil and Duke Tobacco. The movement also resulted in the 1914 establishment of the Federal Trade Commission (FTC), which was tasked with preventing businesses from engaging in unfair competition. In 1928, the FTC launched an investigation in response to public outcry over the financial abuses of the public utility holding companies.⁵¹

Still, the leaders of the power industry generally had little to fear in the 1920s. The idea of public ownership was on the wane. As President Calvin Coolidge, who would spend a summer in the Black Hills in 1927, told the nation in his inaugural address in 1925, "the policy of public ownership of railroads and certain electric utilities met with unmistakable defeat" with his election.52 His successor, President Herbert Hoover, an engineer by training, was also a champion of the consolidation movement in power generation, believing it brought greater efficiency to the marketplace.53 Unfortunately, the nation's finances were on thin ice as the 1920s came to a close, and in the Black Hills, the quality of service was deteriorating. In Rapid City, a newly relocated businessman from Missouri would have to put the pieces back together.

Ben French Arrives in Rapid City

Dakota Power was in deep trouble in 1929 when Ben French arrived in the Black Hills. The company's franchise had expired and its parent company, Community Power & Light, refused to invest in plant improvements without a franchise. Residents and public officials complained of poor service and high rates. The situation went from bad to worse. When an out-of-town competitor proposed to build a diesel power plant and promised to guarantee rates to the city's consumers, Rapid City voters awarded this new company a 20-year franchise.

French was supposed to fix it all. At age 36, he was a 17-year veteran of the electric industry. Born in Syracuse, Missouri in 1893, he started his career with the electric company in Carthage, Missouri at age 19. Shortly after he married Grace Stults in 1916, they moved to Kansas. There, French became sales manager of the Fort Scott Gas & Electric Company, which had been acquired by Community Power & Light, a holding company that owned a number of local utilities. In 1921, French was transferred to Arkansas, where he served as district manager, overseeing several power companies. Three years later, he moved to Texas, again as a district manager, before being relocated to South Dakota.54

Soon after he arrived in Rapid City, French went on the offensive. Dakota Power took the competition to court. Lawyers for Dakota Power argued that a guaranteed rate was illegal under South Dakota law. When the courts upheld Dakota Power's argument, French regrouped. Dakota Power applied for a new franchise, but the voters turned the company down. Public officials even began to talk about establishing a municipal power system.55

As he worked to placate Rapid Citians, French had to make the case to the parent company that Dakota Power had to have capital to be successful. He gained some new money and made some improvements, creating efficiencies that allowed Dakota Power to lower rates. French also worked to improve public relations, but voters continued to turn down the company's appeal for a franchise.⁵⁶ It was hard to make progress against the backdrop of the Great Depression.



George Mansfield and Ben French represented the past and the future of the Dakota Power Company in the 1930s. Together they worked with employees to convince the people of Rapid City to provide a franchise that would reassure investors and give the company access to muchneeded capital.

Great Depression Hits the Country

In South Dakota, the economy of the 1920s was never very good. It got worse after the stock market crashed in 1929, and a series of terrible drought years, combined with grass-hopper plagues, forced many families to leave their land. The population of every West River county diminished except for Pennington County, which had its seat in Rapid City.⁵⁷ Some failed farmers and ranchers came to town looking for jobs; others sought work with the Homestake Mine in Lead. Each morning, hundreds of unemployed men stood in front of the company's offices hoping for day labor.

For these men and for the state of South Dakota, Homestake was the bright spot during the Depression. As wary investors turned to gold, the value of Homestake's stock rose and the mine boomed. Plans for a new shaft, named for mine superintendent A.J.M. Ross, were developed in 1932.⁵⁸ When Congress raised the price of gold in 1934 from \$20.67 per

ounce to \$35, investment in the mine accelerated. Homestake installed new, high-speed Nordberg hoists, each weighing more than I million pounds, in the new Ross shaft, which became operational in November 1934.⁵⁹

To power the huge new hoists as well as the mine's other operations, Homestake needed a more reliable source of



more reliable source of power. In the early 1930s, the company still relied on its three hydroelectric plants in Spearfish Canyon and near Englewood as well as a small coal-fired plant in Lead. But these plants could not meet the demands of a modern mine. Homestake began construction of a new power plant in the gulch south of Gold Run in 1934. The 12,000-

The stock market crashed in October 1929. This signaled the start of the Great Depression. The crash led to a restructuring of the banking industry and the break-up of large public utility holding companies.

KW, coal-fired Kirk Plant cost \$1.75 million.⁶⁰ When it was finished in 1935, the plant consumed approximately 60,000 tons of coal a year — coal that came from Homestake's Wyodak Mine near Gillette.

In addition to meeting Homestake's needs, the Kirk Plant provided an additional source of power to the northern Black Hills. Additional power, however, did little to help the power companies, who were struggling to survive the Depression. Like the nation, French and other employees at Dakota Power and Consolidated Power & Light cast an anxious eye towards Washington.

HOMESTAKE BUILDS THE KIRK PLANT



With the collapse of the stock market, demand for gold soared in the early 1930s as people looked for a safe investment. Homestake's stock price rose as the market fell. By 1933, as historian Mildred Fielder puts it, "Homestake was making money hand over fist."

To power the expansion of its operations, Homestake began building a 12,000 KW coal-fired plant outside of Lead in 1934. Completed the following year, the Kirk Plant cost nearly \$1.75 million (\$33.3 million in 2018 dollars). Compared with Homestake's three existing hydroelectric plants and small coal-fired plant in Lead, the new plant was far more reliable and efficient. To keep its fires burning, the Kirk Plant consumed 60,000 tons of coal per year — about half of Wyodak's annual production.

Power from the Kirk Plant drove the huge new Nordberg hoists that Homestake installed to raise and lower the elevators in its two main shafts. It ran the pumps that pulled water from the ever-deepening mine. It drove the loud ore-crushing stamp mills that pulverized the rock mined from the earth. Altogether, Homestake operated 450 electric motors with a connected load of 30,000 horsepower by 1937. The company consumed more than 59 million kilowatt-hours per year. Fuel to meet this voracious demand was mined at Wyodak and shipped by rail to Lead.

Managing Back to Prosperity

As the Depression entered its third year in 1932, Americans were eager - even desperate for change. In November, Franklin Delano Roosevelt crushed Herbert Hoover's bid for re-election and swept into the White House with an overwhelming mandate for action. In his first 100 days in office in 1933, Roosevelt introduced legislation to stabilize the economy and to put people back to work. His administration launched a host of initiatives designed to reorganize the national economy and give the federal government a greater influence over the marketplace. The success of these initiatives brought profound change to the federal government, giving rise to what historians called the "administrative state."

When campaigning for president in 1932, Roosevelt told voters in Portland, Oregon that "Electricity is no longer a luxury, it is a definite necessity."⁶¹ He included rural electrification projects in his request for emergency relief appropriations. He established the Rural Electric Administration (REA) on May 11, 1935 to help extend electric service to rural communities. The following year, Congress passed the Rural Electrification Act of 1936, which was supposed to give preferential loans to nonprofit organizations.

These nonprofits were generally cooperatives — a type of entity already deeply embedded in the landscape of farm communities by the 1930s — which were used to market crops, run grain elevators, and build water systems. The first electric cooperative had been organized in Granite Falls, Minnesota in 1914, and by 1935, there were 46 cooperatives operating in 13 states. As the REA came into being, its staff developed model laws for states to adopt and provided technical assistance to rural communities. In its first year, the agency loaned more than \$62 million to help rural electric cooperatives get going.⁶²

Shareholder-owned utilities feared state-sponsored competition from the cooperatives, but they were actually indirect beneficiaries of the REA, which generally focused on helping rural cooperatives build transmission facilities to reach rural residents. Shareholder-owned power generators profited secondarily by selling wholesale power to the cooperatives. Rural electrification also benefitted companies such as Dakota Power by stimulating the regional economy. Nevertheless, in some regions, shareholder-owned companies undermined cooperatives by building so-called "spite" lines into REA districts so that they could compete directly for customers.⁶³

Despite these tensions, the REA helped rural cooperatives erect more than 73,000 miles of electrical lines in 1936 and 1937 and deliver service to more than 300,000 farms across the country. By 1941, the cooperatives had more than 900,000 customers.⁶⁴

Breaking Up the Holding Companies

The collapse of the stock market in 1929 sent shock waves through the investment community, crumbling the pyramid structures of many public-utility holding companies.

The biggest shock to the electric power industry came in 1932 when a holding company belonging to Samuel Insull, a one-time protégé of Thomas Edison, collapsed. With over a million stockholders and bondholders, Insull's companies had been providing power to 4 million customers in 32 states. Insull fled to Europe. Politicians used the story of his business dealings and flight to stir opposition to the utilities. Indicted and extradited back to Illinois, Insull was tried in Chicago for embezzlement and larceny. Yet in court, jurors, and even the prosecuting attorney, grew to admire Insull for the way he had built a national electric utility system, and he was acquitted. The damage to the holding company system, however, had been done.65

In the Black Hills, employees of the Dakota Power Company and Consolidated Power & Light felt the financial pressures of the stock market collapse. Harry Hartley, who managed the Pluma and Redwater Plants, recalled that the corporate managers for Dakota Power's parent, General Public Utilities Company, pressured "all employees to not only buy stock themselves, but to get out and sell as much as they could to others," but to no avail.⁶⁶ In the meantime, the American people demanded that speculators be removed from the industry that seemed, to many, a basic life necessity.

In 1935, Congress passed the Public Utilities Holding Company Act (PUHCA), which broke up large, national trusts and prevented speculators from inflating values of utility companies.⁶⁷ The U.S. Supreme Court upheld the act when it was challenged, and the large, national companies were forced to begin divesting their holdings.

Law Has Little Effect in South Dakota

The passage of the PUHCA had little immediate impact on the power companies in the Black Hills. Through the 1930s, Dakota Power and Consolidated Power & Light focused on integrating operations and escaped the first wave of divestitures. "Since there was no electric operating company near enough," French said, "we were allowed to continue operations as a subsidiary."

While they waited for decisions at the national level, French and Dakota Power Company employees continued to earn the loyalty of customers in Rapid City. Employees and friends ran a vigorous campaign in 1937, finally winning the company a franchise in the election by a three-to-one margin. Recognizing French's efforts, Community Power & Light named him president of Dakota Power Company and gave him a seat on the board of directors of the holding company.⁶⁸

As a member of this board, French traveled often to New York, where he met with Federal Trade Commission officials and became convinced that the government would eventually force Community Power & Light to divest its Black Hills companies.⁶⁹ French viewed independence with mixed emotions. By 1940, he had struggled with corporate executives in New York for more than a decade, fighting for the capital Dakota Power needed to grow and to provide good service. Community Power & Light had never been generous, but at



least the New York executives had access to Wall Street money. The parent company also provided key executives who had been trained in other, larger utilities before coming to Dakota Power. Without a parent company, an independent Black Hills utility company would have been challenged to meet these needs. Dakota Power opponents warned citizens that the company would raise its rates if it received a franchise. Volunteers went door to door handing out flyers urging a "No" vote.



PLATE 6 INCANDESCENT LAMP ON JOINTLY USED POLE SHOWING USE OF TWIN CONDUCTOR ON PINS AND INSULATORS FOR VERTICAL RUN

CHEYENNE LIGHT, FUEL & POWER

Cheyenne Light Fuel & Power



Like Black Hills Corporation, the predecessors of Cheyenne Light, Fuel & Power began providing utility services in the 1880s. First, a pair of inventors incorporated the Brush-Swan Electric Light Company of Cheyenne in the summer of 1882. They initially provided power by loading batteries Cheyenne Light, Fuel & Power's new main office illuminated 18th Street in Cheyenne in 1943.

onto wagons and delivering them to customers in Cheyenne and across Laramie County. As technology progressed, they transitioned to installing overhead wires that could power municipal arc lamps. Meanwhile, in 1883, another group of investors created the Cheyenne City Gas Company, which competed with Brush-Swan for several years. In 1900, however, the two companies merged and formed Cheyenne Light, Fuel & Power.¹

Like early electric and gas utilities everywhere, the company spent the next couple of decades refining its service, expanding its network, and struggling to keep pace with technological innovations and growing demand in and around Cheyenne.²

As part of the nationwide utilities consolidation movement of the 1920s, the Public Service Company of Colorado (PSCo), a Denver-based electric and gas utility, acquired Cheyenne Light, Fuel & Power. Founded in 1923 after a variety of gas and electric companies (the oldest of which dated back to 1869) merged into one, PSCo served a variety of residents across Colorado.³ When Cheyenne Light joined PSCo's network in 1923, the company retained its name and continued to serve its local customers. As part of PSCo, it also had access to an expanded network of infrastructure and supply lines. For example, PSCo installed gas lines extending all the way to Amarillo, Texas in the 1920s, which allowed Cheyenne Light's customers to heat their homes and businesses with fuel sourced hundreds of miles away.

Similarly, in 1938, Cheyenne Light started buying extra electricity from the Seminoe Dam hydroelectric plant some 250 miles northwest of Cheyenne to meet peak demand.⁴

Now equipped with a steady, reliable supply of gas and electric generation, Cheyenne Light invested in a new headquarters in downtown Cheyenne. It opened in late January, 1942, and



more than 4,000 people attended the dedication. From their new offices, company officials oversaw the slow updating and expansion of Cheyenne Light's gas networks, as well as the creation of a series of power purchase agreements that kept the lights on as Cheyenne and surrounding communities grew through the middle of the twentieth century. To keep pace with demand in the 1960s, Cheyenne Light added diesel generation units and started to purchase power from Pacific Power & Light in 1963. A little over a decade later, Cheyenne Light served customers spread across Laramie County.⁵

Like many American gas and electric utilities, Cheyenne Light carefully navigated the unsteady economy of the 1970s and early 1980s. As conditions improved in the late 1980s, and as Cheyenne and the surrounding communities invested in infrastructural upgrades, Cheyenne Light continued to grow and refine its customer service strategies. In 1993, the company launched a project to connect the Cheyenne Business Parkway — a 900acre industrial park just east of downtown Cheyenne — to an oil and gas gathering field owned by Union Pacific Resources. Tying the two together with an extended intermediate pressure line, Cheyenne Light fueled the industries doing business at the Parkway. A few years later, Cheyenne Light launched a new customer service program aimed at incentivizing good customer service and promoting brand loyalty. The company offered a cashvalue voucher customers could use to pay their bill if they had a negative experience with Cheyenne Light's service or a company representative.⁶

In the late 1990s, just as deregulation was approaching its crest, another wave of consolidation swept across the energy industry. The employees at Cheyenne Light continued providing gas and electric service to customers in and around southeastern Wyoming. Meanwhile, Cheyenne Light experienced a series of ownership changes that arose from mergers and acquisitions by larger utility holding firms. This process ended in 2005, when Black Hills Corporation — which had already been selling power to Cheyenne Light since 2001 — bought Cheyenne Light, Fuel & Power from Minneapolis-based Xcel Energy. Throughout these ownership changes and the rocky years surrounding the end of the deregulation era, many long-term employees stayed with Cheyenne Light and remained committed to providing a friendly, dependable source of energy to communities across southeastern Wyoming.

EXPANDING THE ENERGY HORIZON

"Maybe tomorrow the bells will ring, The whistles blow and the children sing That peace has come back to earth again And sanity has returned to men.

Maybe tomorrow the sun will rise On a peaceful earth, beneath peaceful skies, Blue skies, whose billowing clouds contain, Not roaring, screaming death - but rain.

Maybe tomorrow the rain will fall On brown, scorched lands, and disperse the pall Of strife and hate that lingers there On once-green fields that no longer bear.

Maybe tomorrow when guns are stilled And destruction's done we'll start to build The homes we've saved and waited for And start to really live once more."

ANONYMOUS POEM, PRINTED IN BLACK HILLS **POWER & LIGHT'S FIRST ANNUAL REPORT IN 1942.**

CREATING BLACK HILLS POWER & LIGHT

As the nation teetered on the brink of world war, Dakota Power and Consolidated Power & Light became the Black Hills Power & Light Company. The new enterprise evolved to meet the nation's defense needs by providing power to new federal facilities, including an air base and ammunition depot. With the end of the war, industrial and consumer demand surged as the economy boomed. Cooperatives and shareholder-owned utilities battled one another to determine who would serve new markets.

CHAPTER THREE

CHAPTER THREE - CREATING BLACK HILLS POWER & LIGHT

s the senior manager for General Public Utilities in the Black Hills, Ben French could have turned over the operations of Dakota Power Company to a new owner and moved on when Community Power & Light broke up. Having planted himself and his family in the Black Hills and grown to appreciate the employees and customers in the area, he chose to stay. French also sensed an opportunity.

Community Power & Light Company, the Floridabased master holding company that owned General Public Utilities (including Consolidated Power & Light) and Dakota Power Company as well as properties in ten states, planned to shed its holding corporate structure and become an actual operating company. It announced that it would divest a number of utility companies that did not fit with its strategy, including businesses in Arizona, Arkansas, Kansas, Missouri, and South Dakota.¹ However, when Community Power & Light offered these

entities for sale, only two bidders came forward. Locals, as French learned, found both bidders unattractive, and in 1941, he decided to seek investors for a new South Dakota corporation that could merge the assets of Dakota Power and Consolidated Power & Light.²

With his Wall Street connections, J.B. "Ben" French was able to negotiate and oversee the creation of Black Hills Power & Light Company.

The organizers — Henry Nesbitt, George Philip, William G. Rice, and Ben French — represented a combination of experienced utility managers from the Community Power & Light system and leading figures in the legal community in Rapid City. Nesbitt came to the Black Hills in the mid-1930s to serve as general manager of Consolidated Power & Light.³ Philip, who had practiced law since 1917, served as a U.S. attorney for the District of South Dakota. Judge Rice presided on the bench of the Eighth Judicial Circuit in Deadwood.⁴

The organizers petitioned the secretary of state and, on August 27, 1941, received approved articles of incorporation for the new Black Hills Power & Light Company.⁵ A week later, the incorporators met at the First National Bank Building in Rapid City and issued preferred and common stock worth just over \$1 million.⁶ French and Nesbitt then boarded a train for New York City to meet with the company's newly appointed board of directors and to find investors willing to buy the company's stock.

Three days later, on the morning of September 5, the directors of Black Hills Power & Light Company gathered at 50 Broadway amid the skyscrapers of New York's financial district and not far from Wall Street. Recognizing French's work in putting the company

Dakota School of Mines named Neil G. Simpson, was elected vice president. To oversee the company's finances, the directors picked Beala B. Neel as secretary/ treasurer.7 Neel, like French and Nesbitt, had worked his way up through the General Public Utilities Company and had been sent to Rapid City to help French

together, the directors elected

him chairman and president.

recent graduate of the South

His right-hand man, a relatively

To raise capital, the board agreed

turn Dakota Power around.

to sell more than \$2.1 million in first mortgage bonds, secured by the company's extensive property — if and when they acquired it from General Public Utilities.⁸ These assets included land in the Black Hills; the electric generating plants in Rapid City, Custer, Pluma, and Butte County; and the transmission and distribution systems, substations, and contracts for rights of way. It also included an agreement with the Holy Terror Mining Company to purchase a trans-Davenport; and Beala B. Neel mission line and system in Custer County and a contract with Tri-State Milling Company to buy the hydroelectric plant on Redwater River. There were also leases for office space in Lead and Newell. Among the new company's assets were franchise agreements with 12 cities across the Black Hills, including Custer, Rapid City, and Deadwood.9

A month later, the board met again in Rapid City. To attract investors, it established the dividend for their new company; then French and Neel left again for New York to meet with investment bankers. The success of the fledgling company depended on raising capital.

Fortunately, French had previously worked in Arkansas with Dillon Read, the CEO of one of the most important investment banking firms of the day. French convinced Read to handle the sale of Black Hills Power & Light's mortgage bonds and stock.¹⁰ French spent most of October in meetings with Read and officials at the Securities and Exchange Commission. By the time he left New York, French had convinced Equitable Life to purchase Black Hills Power & Light's mortgage bonds and secured funding to launch the new company.



The original board of directors of Black Hills Power & Light Company included men who represented the financial interests of the bond holders. local business leaders, and long-time executives from Dakota Power and Consolidated Power & Light. (L to R) J.B. French, president and chairman of the board; Llewellyn H. Heinke; Henry A. Nesbitt; Louis R. Meyers; George Philip; Judge William G. Rice; Jarvis D.

CHAPTER THREE - CREATING BLACK HILLS POWER & LIGHT

French and the other board members had assumed an enormous debt to finance the transaction, and they believed they could execute their work without any interruption in service or revenues. They had good reason to be optimistic. But within a matter of weeks, life in the Black Hills and across the nation would change dramatically.

A Nation at War

Thirty-seven days after he had launched Black Hills Power & Light, French was on his way to (or perhaps already in) Chicago for one of the company's first board of directors'

meetings. It was Sunday, December 7, 1941. That morning, Japanese Zeros came in low over the waters off the island of Oahu, attacking U.S. Navy ships anchored in Pearl Harbor. The following day, President Roosevelt asked a joint session of Congress for a declaration of war.

French probably read the Chicago Tribune before leaving his hotel. As he waited for the start of the 11 a.m. board meeting, he and his colleagues undoubtedly speculated about what war would mean for the nation and for their new company.

When they got down to business, the board scheduled the first stockholders meeting and adopted a salary structure for corporate officers. As president, French would be paid \$15,000 a year (equivalent to about \$241,500 a year in 2018). The other officers received far less.^{II} By the time the board had finished its agenda, the company was ready to go. Riding the train home from Chicago, French could not have predicted the



BLACK HILLS POWER and LIGHT COMPANY

The government established an Army Air Base near Rapid City to train pilots. Black Hills Power & Light scrambled to provide electricity.

war's impact on the Black Hills. Far from the European and Pacific theaters, it may have seemed a distant reality.

Yet the effects of the war soon became apparent, and just three months after Pearl Harbor, nearly a third of the com-

pany's employees had left to join the U.S. Army Corps of Engineers or to work for defense plants. To compensate for the shortage of manpower, the company increased its work week from 40 to 48 hours, maintaining its services with only about 100 employees.¹² In an effort

EXPANDING THE ENERGY HORIZON

to stay in touch with men and women in uniform, Simpson wrote a company newsletter, which many recipients said helped them remain connected to friends back home.¹³

The war sparked public and private investment in defense industries. Looking for inland bases far from the reach of enemy aircraft, the military announced that it would open an air base outside Rapid City and a munitions depot in the southern Black Hills near an unincorporated township called Provo. Together, these projects required approximately 800,000 KW hours of electric power per month.¹⁴

Construction began on the Provo depot in 1942 and eventually included 801 concrete igloos. By November, the first munitions shipments arrived, and Black Hills Power & Light built a generating plant. It also purchased the local electric utility from Mountain States Power Company to provide power to the depot.¹⁵ At the height of the war, 2,344 train-car loads of ammunition and supplies moved in and out of Provo in a three-month period.¹⁶ The generating facilities and transmission lines at Provo cost nearly \$500,000 - expensive projects for a company that had just recapitalized and relaunched itself. The government provided \$200,000, but Black Hills Power & Light financed the rest.

Construction also began on electric service for the new Rapid City Army Air Base. Established to provide a training center for B-17 combat crews, the installation required power for offices and barracks.¹⁷ Black Hills Power & Light built a 12-mile transmission line to reach the new base.¹⁸

Dramatic wartime changes to the national economy compounded the challenges of financing this new construction. Meanwhile, workers continued to leave in order to serve in the armed forces or to work in war industries. For one of Black Hills Power & Light's biggest customers, however, the consequences of the war were even greater.

On October 8, 1942, workers at the Homestake Mine received devastating news. With manpower and material shortages growing across the United States, the federal War Production Board (WPB) decided to shut down all "non-essential" mining operations across the country, including Homestake.¹⁹ The WPB encouraged Homestake to re-locate its 2,200 employees and mine for strategic minerals instead of gold.²⁰ Shutting down Homestake would take time, so the company successfully appealed to the government for a six-month grace period. By the middle of 1943, however, Lead had been decimated: nearly 1,600 men and their families had left the community of 7,500 people.

Ben French confessed to shareholders that closing Homestake and other gold mines "was quite a blow" to Black Hills Power & Light. He expressed concerns about the regional economy, but believed the two defense projects would "partially offset the loss." The rate the company was allowed to charge the government for power was so low, however, net income would be reduced.²¹ On the bright side, the mine's closure allowed Black

War Closes the Homestake Mine
Hills Power & Light to purchase emergency power from Homestake's hydroelectric plants, providing an important and cost-effective source for future years.²²

Other problems abounded. Tourism declined as Americans gave up their vacations to save resources for the war effort. While young men went overseas, their families moved away to work in factories — making the airplanes, radios, artillery, and ships needed to win the fight. At a board meeting in August 1942, French noted the decline in revenues caused by the loss of population and tourists. Despite the squeeze, the company had sufficient earnings to pay the dividend on its stock in the fall of 1942.²³

As the war continued, the company did its best. Operating revenue increased slightly from 1942 to 1943, but net income fell by 12 percent. In addition to keeping the lights on, company leaders and employees did their part to support the war effort. In 1943, Ben French acted as chairman of the Second War Loan Drive in Pennington County, and board member Jarvis Davenport did so for Meade County. Many employees bought war bonds and supported the troops overseas.²⁴

As momentum in the European theater finally began to shift towards the Allies in 1944, the mission of the Rapid City Air

Base transitioned into supporting the B-29 bombers, which were preparing for long-range missions over Japan.²⁵ Business leaders and policymakers began to anticipate the end of the war. In October, French told shareholders that he believed Homestake would "be permitted to go back to normal operation very soon after Germany is defeated."²⁶

End of War Leads to Surge in Demand

On August 6, 1945, a lone American bomber, the *Enola Gay*, flew high over the Japanese city of Hiroshima and unleashed a bomb unlike any the world had ever seen. Japan did not surrender, however, until the United States dropped a second atomic bomb on Nagasaki several days later.

As service men and women returned home and wartime shipyards, aircraft plants, and munitions makers ceased operations, many Americans worried the nation would slide back into depression. Others feared the reintroduction of thousands of workers into the peacetime economy would foment class, racial, and labor tensions.

French had plans to employ some of the returning soldiers and quickly began "to put into effect some of the plans we have had in mind for the post-war era." He talked about

Westinghouse OB, 1924-1941. Smaller than its predecessors, the OB meter used a special stator and a base made of punched steel rather than cast iron.

building new transmission lines to connect the company's generating plants to communities in the Black Hills, noting the need to build new power generation facilities within two to three years.²⁷ His forecasts turned out to be accurate.

Demand for power surged after the war. The Homestake Mine resumed operations on July 2, 1945, bringing home some residents of Lead and Deadwood who had left for defense industry jobs.²⁸ Although manpower shortages plagued the region for years afterwards, the reopening of the mine helped the regional economy.²⁹

The Black Hills economy expanded throughout the 1940s and 1950s. At the end of 1947, French told shareholders that the region's "lumber mills, feldspar plants, bentonite plants and small mines are operating at approximately full capacity." 30 Although many wartime military installations closed for good after the end of the war, the Rapid City Army Air Base was reactivated in March 1947 after a stint of inactivity. It became home to the 28th Strategic Reconnaissance Wing.³¹ When the federal government announced that the facility would not only reopen but expand to handle additional training and defense operations, local businesses celebrated.³² The government invested several million dollars so the base could support B-36 "Peacemakers" — a brand-new bomber with nuclear capabilities. It also added 340 new housing units and announced plans to build an additional 150.33 By 1950, the salaries paid to base personnel added nearly \$8.6 million (comparable to \$89.5 million in 2018 dollars) to the local economy.³⁴

Between 1940 and 1950, Rapid City's population exploded. An 82 percent increase raised the number of city residents to 25,310, as the expansion of the air base (which became "Ellsworth Air Force Base" in 1953) combined with rural-to-urban migration across West River. Fueled by this new demand, Black Hills Power & Light's growth exceeded the industry average by the early 1950s.35





The new main office opened at 621 Sixth Street in Rapid City in 1948. The marquee encouraged patrons to "Be Modern - Live Better Electrically." People listened: Black Hills Power & Light's residential customer base tripled between 1941 and 1961.

Enjoying the first years of peacetime prosperity, Black Hills Power & Light began to build the transmission lines and substations that would carry it into the future. In 1948, the company opened a new headquarters at 621 Sixth Street in Rapid City, including a showroom for the newest electrical appliances and a theater to demonstrate cooking techniques. As the demand for power rose, the company struggled to meet the need and purchased additional power from the Homestake Mine.³⁶ It also began developing plans for a new power plant of its own.

Building the Osage Power Plant

In the middle of the war, Ben French, Neil Simpson, and others had recognized that Black Hills Power & Light would need a new power plant. "We began looking for a location with an abundant water and fuel supply," Simpson said. In 1943, the company considered constructing a coal-fired plant at Wyodak, east of Gillette, Wyoming, but that site lacked an adequate water supply and was too far away to employ 69 kilovolt (KV) transmission, the most economical voltage for use in its system.³⁷

Instead, the company selected a site near Osage, Wyoming, where water flowed from an abandoned oil well at 720 gallons of artesian water per minute.³⁸ While other power companies used relatively expensive coal mined from deep shafts, Osage could burn low-cost, sub-bituminous coal strip-mined by the Wyodak Coal Company less than 70 miles away.³⁹

Black Hills Power & Light broke ground on the Osage Power Plant in January 1947.40 Harry Babbitt, the company's lead plant engineer, oversaw the construction project.41

Edwin Geddes, who had started with Consolidated Power & Light in 1910, was chosen to be the plant manager. Geddes and many of his key supervisors relocated from Deadwood and Lead to homes that were built for them by the company in the field.42

As part of the construction, the company also erected three transmission lines to carry power from Osage to Pluma,

Custer, and Pactola, with tie-lines between all three. A large crew of "swampers" felled trees along the right of way. "Shooters" blasted holes in the rock to allow pole setters and

About 150 people toured the Osage Power Plant during its open house on May 12, 1950. With construction delayed by the war, the plant represented the first major expansion of the company's power generation facilities.

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"framers" to erect the line. Groundmen, or "grunts," attached the guy wires to the anchor rods. When it was done, French confidently explained, the loop "practically insure[d] continuity of service." 43

The new 11,500 KW unit at Osage came online in September 1948, followed by two identical units in 1949 and 1952. The Rushmore Electric Power Cooperative financed construction of the 1952 project using government loans. Then, per their agreement, Black Hills Power & Light leased the unit and furnished electric service at wholesale rates to five Rushmore members, pending the completion of Bureau of Reclamation dams on the Missouri River.44

Since the 1920s, the Homestake Mining Company had operated the Wyodak Mine to provide fuel for its own power plants. It shipped Wyodak coal to Edgemont and then, on a separate switch, carried it on the Burlington Northern line to Lead-Deadwood, where it fueled the boilers in the Kirk and Pluma Power Plants.

By the summer of 1954, Black Hills Power & Light had nearly completed negotiations for a deal that would shape the future of the company. After nearly a year of negotiations, Homestake agreed to sell the Kirk Plant and the power plant outside Gillette, Wyoming to Black Hills Power & Light and offered an option to buy the Wyodak Mine.

Simpson chaired a board meeting at the company's offices on the afternoon of July 19. He presented the proposed agreement to the board, including the purchase price of \$443,614 (\$4.1 million in 2018 dollars), which the board approved unanimously. As Simpson explained, under the terms worked out with Homestake and Wyodak, employees absorbed by Black Hills Power & Light would be allowed into the company's pension and benefit plans with full recognition of their length of service.⁴⁵

With the board's agreement to move forward with the deal, Black Hills Power & Light sought regulatory approval from the Wyoming Public Service Commission and the Federal Power Commission. Three months later, state and federal officials approved the agreement, and the transfer occurred on October 16, 1954.

In 1956, the company had to decide whether it would exercise its option to buy the Wyodak Mine and lease the coal lands of the Wyodak Coal Company. Geological testing suggested that the coal land contained approximately 21 million tons of coal and that some 50 million additional tons existed on adjacent property. "Since the Company is presently using less than 400,000 tons per year," French wrote to stockholders, "it is evident that these reserves will provide low-cost fuel for many years to come."⁴⁶ The board exercised its option and purchased the Wyodak Mine, incorporating the business as a fully separate subsidiary and assuming operations on November 1, 1956.47



Buying the Wyodak Mine

With these new acquisitions underway, Black Hills Power & Light also agreed to continue supplying the City of Gillette and the Tri-State Generation and Transmission Association, serving rural electrics in Wyoming, with power from the 5,000 KW Wyodak steam plant. French told stockholders that the deal would eventually generate nearly \$500,000 a year in additional revenue, but that it would take time.48



The company also upgraded the facilities at each unit. In 1955, the company built a 47 KV line between Wyodak and Osage.⁴⁹ It also reached an agreement with Rushmore G & T Electric Cooperative to build and operate a new, 16,500-KW, turbine-generating unit at the Kirk Plant to provide additional firm power and energy to the cooperative. The unit went online in October 1956.⁵⁰

Wyodak miners charged a blast hole to loosen the coal for excavating. Using an auger, the miners would drill as much as 80 feet into the coal seam.

Changes in Leadership

Neil Simpson's leadership on the Wyodak deal reflected his growing esteem within Black Hills Power & Light. Raised in Chadron, Nebraska, Simpson started working for Dakota Power Company while he was a student at the South Dakota School of Mines in 1937. "He didn't have a nickel to his name," his son, Roger, said. Between starring on the football team and working to keep a roof over his head during the Depression, Simpson took eight years to finish college.⁵¹ Fixing appliances, shelving supplies, and working on a line crew, he experienced his first taste of the utility company's operations. When he finally graduated in 1939, he went to work for the company as a full-time sales engineer, then became a manager in Rapid City. When Black Hills Power & Light was organized in 1941, French asked him to serve as a vice president.

During the war, Simpson served as the local manager in Deadwood. When the war ended, French brought him back to Rapid City to work as his assistant. That same year, 1946, Simpson was elected to the board of directors. On November 1, 1950, he was named

WYODAK SUPPLIED POWER TO GILLETTE



Homestake had constructed the 5 MW coal-burning steam plant at Wyodak to take advantage of nearby low cost fuel. The early "minemouth" facility used a conveyor system that delivered coal from the mine tipple to the hoppers of the power plant. As a result, fuel costs to fire the boilers to turn four relatively small generators were extremely low.

Early miners also used the conveyor system to move the overburden away from the mining operation. The Wyodak plant supplied power for the mining operation.

The Wyodak plant also provided electricity to two important local wholesale customers: the City of Gillette and the Tri-County Rural Electric Association, a cooperative in Wyoming.

Soon after the purchase, Black Hills Power & Light built a 47 KV transmission line to Osage to connect Wyodak with the company's power grid. Management envisioned the construction of a larger power generation plant at the site to take advantage of low fuel costs. With condensing water supplied by local wells, cooling posed a technological challenge. Late in the 1950s, the executive team at Black Hills Power & Light and the managers at Wyodak began to look for a way to solve this problem.



To educate consumers and promote electricity, the company offered patrons the opportunity to play a game called "Reddy Roulette" at home shows in the 1950s. general manager, akin to what would be called chief operating officer today.⁵² That year, French, who continued as president, began a concurrent, two-year stint as president of the Southern Colorado Power Company, leaving Simpson increasingly in charge of day-to-day operations and strategy at Black Hills Power & Light.⁵³

By the mid-1950s, Simpson was often the public face of the company. After the annual meeting in April 1953, for example, he went on the road to discuss the company, which was now in its eleventh year of operations. He spoke to the Lions Clubs in Newcastle, Custer and Belle Fourche; the Community Club in Newell; and the Lead Kiwanis. Emphasizing the local character of the company, Simpson pointed out that the second-largest portion of Black Hills Power & Light stock was owned by South Dakotans.⁵⁴

Simpson was also active in the community. President of the Rotary Club in 1953 and 1954, he went on to become president of the Community Chest, forerunner to the United Way,

EXPANDING THE ENERGY HORIZON



Electric blankets offered Black Hills customers one more way to "live better electrically." in 1955.⁵⁵ Two years later, he served as president of the Rapid City Chamber of Commerce. He and his wife Virginia — who served as school board president in the mid-1950s — had four children.⁵⁶ Simpson possessed a healthy sense of humor, and in September 1957, one witty newspaper columnist kidded him about a haircut "which [gave] his dome a Yul Brynner appearance." As the paper reported, Simpson's son Pier had greeted his father at breakfast one day by saying "Hi, Baldy." Simpson conceded that "the reflection must be terrific" because that was the "first time that kid has had his eyes open at breakfast." ⁵⁷

Simpson was also the executive most employees were likely to have met and interacted with. He knew their names, along with those of their spouses and children. The company formally recognized Simpson's growing

role in April 1957 when the board elected him president. Retaining his title as chairman, French was increasingly engaged in Colorado and elsewhere. Nevertheless, French stayed involved with Black Hills Power & Light, especially with regard to "long-range planning" and the development of the company's subsidiary, the Wyodak Resources Development Corporation.⁵⁸

With the acquisition of the Wyodak Mine, Black Hills Power & Light had entered a new chapter in its history. With a stable source of low-cost fuel, the company could shape its own destiny. Having survived startup and the war, the company had proven by the mid-1950s that it could pay its bills and produce modest revenue growth for its shareholders. As *Barron's* reported in 1955, increased mining for a number of minerals, including uranium, combined with expansion of the Air Force base and the continued growth of Homestake, had fueled demand for power.⁵⁹ Keeping up with it would prove a central challenge in the coming decade.

The following year, the company announced that it would build a three-story addition to its headquarters building at 621 Sixth Street. Simpson noted how dramatically the company had grown, declaring that "our total employees have increased from 200 to 300, with a good share of the increase in Rapid City." ⁶⁰ The future, he thought, looked bright.



Most of the company's managers and executives in the postwar era were college-educated. Many were graduates of the SDSM&T, including: (Seated-L to R) Bob Asheim, Neil Simpson, and Kermit Fenner. (Standing-L to R) Lyle McNulty, Herman Fuhlbrugge, and Lloyd Adel.

ARMY AIR BASE STAFF PICTURED

"It's unfair to the people of this area for us to collect taxes from our customers to help TVA [Tennessee Valley Authority] sell power at a lower price to their customers."

NEIL SIMPSON, PRESIDENT, **BLACK HILLS POWER & LIGHT COMPANY**

re of here officers taken at the Repid City army row, left to right) Maj. David H. Bulleugh utive officer: Lt. Jasper W. Thompinspectory Lt. Richard A. Johnson, weather officary Lt. James Dearborn, hase adjutant, and Lt. W. Sam Bunker, finance office fourth row-Lt. Robert S. Fisks, officer's club, mess. Bess office not present at the time the picture was taken include Mat. Gla H. Alexander, sub-depot commander: Maj. Raphael S. Gibbs, bexecutive officer and public relations officer: Capt. John P. Ma Kovoc, present hase quartermatter: Capt. Charles E. Burkhart, pe sonnel officer; Lt. Murray Borden, plans, training officer; Lt. Larm H. Abbatt, past exchange officer: Maj. Louis F. Cherry, base dent surgeon: Gapt. Edward P. Clark, bass operations officer: Lt. Je nus, hase chuplain: Lt. Roderlek N. Cronk, commandi officer of headquarters squadron, and Lt. William C. Stinnett, h ordnance officer. Of the group pictured Lt. Caheen is at press on datached service and Capt. Ten Houten has been transferre

EXPANDING THE ENERGY HORIZON

EXPANDING FUTURES ON THE GREAT PLAINS

Through the late 1950s and 1960s, Black Hills Power & Light continued to expand, absorbing smaller companies in the region and offering power and transmission services to other areas in collaboration with public power agencies and rural electric cooperatives. Yet tensions with the rural cooperatives over territories and customers were building. As the federal government moved forward on plans to construct dams and hydroelectric facilities on the Missouri River, officials at Black Hills Power & Light struggled to hang on to their market.

CHAPTER FOUR



A lthough it never materialized in the years following World War I, Governor Peter Norbeck's plan for Missouri River hydroelectric dams lingered in the minds of many policymakers in Pierre and Washington, D.C. South Dakota's congressional delegation hoped that dams on the river would revive the state's economy, which had been ravaged by drought, depression, and war. Two years

The Flood Control Act of 1944 provided for the construction of four major dams on the Missouri River in South Dakota. The last of these projects, the Big Bend Dam, was dedicated in 1966.

had been ravaged by drought, depression, and war. Two years after Congress passed the Flood Control Act in 1944, South Dakota Governor Q.M. Sharpe presided over the ground-breaking of the first dam on the Missouri River near Kansas City.¹

When construction first began, South Dakota worried it would not get its "fair share" of Missouri River power, so the governor appointed a study committee to develop sound governing policies that would ensure a strong power supply for his state. With representatives from the cooperatives and both municipal and shareholder-owned electric companies, the committee offered two different bills to the state legislature: one proposing the creation of a state authority; the other enabling the creation of public power districts. The public power district bill passed in 1950.

While Black Hills Power & Light officials quietly worried about the competition from public power, executives publicly reassured shareholders that municipalities had had the

EXPANDING THE ENERGY HORIZON

right to create public power companies for years, but none had done so in the company's territory. Since it would take a vote of the people, the company said it was confident that there would be no competitive threat. But the issue did not go away.²

As it became clear that dam-generated power would become available to public institutions and rural cooperatives in South Dakota, Black Hills Power & Light sought to turn a competitive threat into an opportunity. If the company was not going to sell its power, it could at least provide or share transmission facilities. In 1950, Ben French and officials from the Rural Electric Administration (REA) went to Washington, where French testified before Congress in support of efforts by the Bureau of Reclamation to build a transmission line from Rapid City towards the river.³

For the next several years, French pushed for the company to be able to share the transmission line. At a meeting held at the Hotel Alex Johnson in Rapid City on November 3, 1953, he argued that the line was necessary to maintain high standards of service, especially for institutional customers, including military projects, public institutions, and hospitals.⁴ Officials from the Bureau of Reclamation and the rural electric companies, however, resisted French's plan. The cooperatives saw it as a competitive threat. George Crouch, president of West River Electric Association, told the *Rapid City Journal* that his association had "pretty well made up its mind" to oppose the creation of the second line French had requested.⁵

Despite resistance from the rural cooperatives, Black Hills Power & Light continued to negotiate with the Bureau of Reclamation. In the spring of 1955, French told shareholders that the company was on the verge of an agreement with the Bureau that would allow Black Hills Power & Light to purchase "secondary and dump" energy; "wheel," or transmit, Missouri River power to Rushmore Electric Power Cooperative (a wholesaler that provided generation and transmission to retail cooperatives); and exchange economy and emergency power over its lines.⁶ That agreement was signed on June 11, 1955 with the expectation that Missouri River power would become available after the first of the year.⁷

As planning for the Missouri River facilities, including the Oahe dam, moved forward in 1954, South Dakota Senator Karl Mundt also floated the idea that a nuclear power plant might be built to supplement the power produced by the dams. Mundt pushed for a joint study by the REA and the Atomic Energy Commission.⁸

These plans seemed to confirm his fears about the availability of Missouri River energy for South Dakota, and Governor Joe Foss argued that South Dakota had to "move fast" before Oahe power "slip[ped] away." He named a state power coordinating committee, consisting of Neil Simpson and various officials from public power and rural cooperatives, "to assure South Dakota a fair share of Missouri River power."⁹

With the completion of the Missouri River hydroelectric dams, public officials continued to discuss replacing private power suppliers altogether. In 1959, Governor Ralph Herseth

NUCLEAR POWER IN SOUTH DAKOTA



Science fiction writers and cartoonists in the 1950s imagined that the world would soon be powered by atomic energy. South Dakota Senator Karl Mundt promoted the idea of a nuclear power plant along the Missouri River in 1954, but his plant was never built.

The world's first all-nuclear power plant was developed on the Big Sioux River near Sioux Falls by Northern States Power (NSP) and began operating in 1964. NSP soon discovered that operating costs for its experimental 66 MW Pathfinder plant were high. They converted the plant to a conventional, gas-fired steam boiler in 1967.

suggested that the state could save \$150,000 a year at the state-owned cement plant in Rapid City by switching from Black Hills Power & Light to Bureau of Reclamation energy. The cement plant's contract with Black Hills Power & Light was set to expire in January 1961, and company officials scrambled to address Herseth's proposal.¹⁰

To company officials, the situation was complicated by the already low rates paid by the cement plant. The Wyoming Public Service Commission (WPSC), which looked at Black Hills Power & Light's finances as part of its effort to regulate the company's services in Wyoming, thought the rates were so low that they couldn't be justified on a cost basis and were unfair to other customers. Caught between Wyoming regulators on the one hand and the summer of 1957. governor of South Dakota on the other, Black Hills Power & Light decided to activate a cancellation clause built into the contract with the cement plant. With the announcement on January 24, 1959, the company hoped to force the State of South Dakota and the Bureau of Reclamation to the bargaining table.¹¹

Adding a layer of complexity to these negotiations, Jarvis Davenport, a Sturgis native, long-time member of Black Hills Power & Light's board of directors and chairman of the executive committee, was also the chairman of the State Cement Plant board.¹² A prominent Republican and member of the board of the U.S. Chamber of Commerce, Davenport had served on the cement plant board for 17 years. He believed the plant ran well and served the people and industries of the state, despite his acknowledgement that it was an inherently "socialistic" venture. He urged the governor and others to keep politics out of the plant's operations and preferred that private enterprise provide the power.¹³

At the time, the state cement plant was Black Hills Power & Light's second largest customer, and as the controversy and the issue of public power continued, Simpson and French frequently reminded audiences that shareholder-owned companies contributed substantially to the local tax base. They also asserted that federal taxes paid by the company had helped finance the Missouri River dams, while cooperatives and municipal power companies paid much lower taxes. Simpson compared Black Hills Power & Light to Consumers Public Power District of Nebraska, which had a net plant valuation of \$46 million. Even though it had a total revenue of \$15 million in 1959, the district paid only \$225,000 in taxes. In contrast,



Black Hills Power & Light's close association with SDSM&T led to a number of collaborations, including the electric meter school for employees. Members of the program's third class posed for this photograph in the

Black Hills Power & Light had a net property value of \$20 million, revenues of \$6 million, and paid nearly \$1.2 million in taxes.14

On other occasions, Simpson sharply criticized public power. At a luncheon in 1959, he blasted the Tennessee Valley Authority (TVA) as "one of the most glaring examples of encroaching socialism." He went on to say that it was "unfair to the people of this area for us to collect taxes from our customers to help TVA sell power at a lower price to their customers." 15



As the number of customers grew, office clerks kept track of each account on file cards. For years, many customers came to the office to pay their bill and save the cost of a stamp

Simpson's critiques sparked reactions from regional cooperatives. Speaking to the Rapid City Lion's Club in January 1960, the head of the West River Electric Association rejected Simpson's characterization of the cooperatives as "socialistic and communistic." He pointed out that cooperative-owned

power plants provided "two-fifths of the power available to Black Hills Power & Light." Simpson's complaints, he argued, were tantamount to the company "biting the hand that feeds it."¹⁶ Simpson countered publicly, arguing that he had no quarrel with cooperatives or the REA "so long as they remain within [the] areas they were originally intended to serve." ¹⁷

With this debate looming in the background, the cement plant issue moved toward resolution. The state had hired a consultant to analyze the plant's electric needs and the facilities of the available suppliers. The consultant concluded that converting to Bureau of Reclamation power would only produce "negligible" savings. Transmission over 170 miles on a single line, moreover, "was not dependable enough for cement plant operations."¹⁸ With this report in hand, the State of South Dakota and Black Hills Power & Light signed a new contract in October 1960. Under its terms, Black Hills Power & Light would continue to supply one-third of the plant's electric power at an increased rate, while the Bureau of Reclamation would supply the remaining two-thirds of the plant's requirements. Black Hills Power & Light agreed to wheel the Bureau's power over its transmission lines for a flat rate per kilowatt hour (KWH).¹⁹ This agreement provided the framework for a new rate structure that Black Hills Power & Light would offer to all of its industrial customers.

Despite the fiery rhetoric that divided Black Hills Power & Light and the cooperatives, the company continued to navigate the ambiguous relationship — at times competitive and at other times cooperative — between shareholder-owned companies, public power companies, and rural cooperatives. In the semi-urban areas surrounding cities in the Black



Hills, the company looked for ways to combine the rural electric cooperatives' access to inexpensive government financing with the company's superior management and technological skills. In the 1950s, for example, Black Hills Power & Light entered into multiple agreements with Rushmore Electric Power Cooperative to install and operate power plants at Osage and at the Kirk Plant in Lead.²⁰ In 1961, Black Hills Power & Light negotiated a high-voltage inter-tie with Consumers Public Power District (CPPD) of Nebraska, which allowed Black Hills Power & Light to purchase additional capacity and pool operations in the Rocky Mountain area.²¹ Despite these efforts to cooperate, however, tensions with the rural electrics increased in the 1960s.²²

Cooperation between the rural electrics and Black Hills Power & Light reflected the integration of the electric grid across western South Dakota and Wyoming — a process also made apparent by the company's continuing acquisition of small, independent companies and municipal companies like the Mountain States Power Company near Edgemont,

The original Belle Fourche Light, Heat & Power Company began its operations in 1906. As a division of Black Hills Power & Light, it bordered a number of rural electric cooperatives prompting occasional conflicts over new customers.

Continuing Consolidation in the Black Hills

EXPANDING THE ENERGY HORIZON

of a cartoon in the Black Hills Power & Light Company 1949 Annual Report. which Black Hills purchased during World War II.²³ After

Left: These images appeared as part the war, the company also bought Mountain States' electric property in Newcastle, Wyoming and, in late 1952, acquired the Battle Creek Power Company's distribution system in Keystone at the foot of Mount Rushmore.²⁴ The next year, Black Hills Power & Light opened a branch office in Hill City, and in July 1960, the company announced plans to purchase electric properties in Hot Springs, Buffalo Gap, and Oral from the Central Gas & Electric Company. These acquisitions helped increase Black Hills Power & Light's customer base by nearly 10 percent.²⁵

Even these acquisitions, however, were colored by the tensions over public versus private power. In Hot Springs, a group of citizens that had been lobbying the city to purchase Central's facilities and create a municipal electric company took out a large advertisement in the Hot Springs Star protesting the fact that Central had refused to negotiate with the city.²⁶ Despite these concerns, the deal went through. When it was complete, Black Hills Power & Light was the only remaining shareholder-owned electric service provider in the Black Hills.²⁷

Organized labor grew stronger across the nation after World War II. It even touched South Dakota, long a "right-to-work" state. Although executives at Black Hills Power & Light repeatedly expressed pride in the company's employee relations, management clearly associated worker organizations with the spread of communism. The 1949 annual report, for example, included a full-page cartoon depicting "The Story of Ten Little Free Workers," including "Reddy Kilowatt," who lost their freedom to collectivization and socialized government programs.²⁸

In the mid-1950s, the International Brotherhood of Electrical Workers (IBEW) made several efforts to organize the employees of Black Hills Power & Light. In 1955, Rapid City Local 1250 filed a petition for a hearing and election to be supervised by the National Labor Relations Board (NLRB). Simpson made it clear that the company would "keep a hands-off policy and let employees make up their own minds," hinting that he expected the measure to be defeated at the ballot box when he pointed out to reporters that, since 1941, salaries of many field workers had increased 300 percent while the cost of living had only risen 98 percent. He noted that the company also provided generous fringe benefits including sick leave, insurance, vacation time, recreation, and other programs. Altogether, Simpson said, these benefits increased the value of the employee's compensation by 31 percent over take-home pay.29

When it came time to vote, 99 percent of the company's eligible employees cast their ballots. They rejected the union by a margin of 55 to 45 percent.³⁰ A year later, the IBEW tried again, this time filing their petition with the Minnesota office of the IBEW, which was part of the newly formed AFL-CIO, the nation's largest federation of labor organizations.³¹



They work when and where ordered, and at a fixed rate you are And it all could have been prevented if they'd only seen fit to agree And work together instead of saying "it never can happen to mel"

Collective Bargaining Sparks Debate

Simpson once again expressed confidence that employees would reject the union. "It is my firm belief," he told journalists, "that a union would not be beneficial to either the company or our employees" because it would contribute nothing "except difficulty in the administration of future policies." Nevertheless, he encouraged all employees to get out and vote.³² Supervised by the NLRB, the election took place over the course of two days in 18 different locations. By a tally of 106 to 65, the measure was defeated again.33

Work life for Black Hills Power & Light's employees continued to improve throughout the prosperous 1950s. Following a nationwide trend, in October 1956, the company reduced the work-week from 48 to 40 hours without reducing employees' take-home pay. The next year, the company extended this benefit to generating plant employees - the only group excluded

from the 1956 adjustment.³⁴ Benefits like these incentivized employee loyalty, which in turn promoted remarkable stability for the company's workforce. By 1959, two-thirds of the company's full-time employees had been with the company for five years or longer, yet efforts to unionize them continued into the 1960s.35

More Appliances Means More Demand

Black Hills Power & Light continued to sell and service electric appliances throughout the 1950s and 1960s. The growing popularity of air conditioning played a key role in increasing electrical demand, especially during the summer, which had previously been slow for electric utilities. Between 1957 and 1959, Simpson told shareholders, the increase in summertime usage changed the annual load pattern "substantially," thereby creating "an improved load factor" and "more efficient use of our generation and transmission investment."36

Other devices also drove consumer demand. In 1950, fewer than one in ten American families owned a television. By 1960, nine out of ten households watched The Andy Griffith Show, My Three Sons, the Donna Reed Show, or the presidential debates between John F. Kennedy and Richard Nixon. Across the country, the television was plugged in and turned on for five hours a day in the average American home, contributing to the growing demand for electric power.37



month to teach "electric cookery" to women across the Northern Hills.

A NEW GENERATION IN AN ELECTRIC KITCHEN



Cooking classes helped girls and boys learn how to fend for themselves in the kitchen. They also supported the company's overall public relations program and introduced a new generation of electric appliances.

Summer classes were offered by the employees of the Home Service Department. In 1957, more than 600 youth participated. They received eight hours of instruction using electric ranges and ovens. Participants took home Reddy Kilowatt recipe cards for muffins, donuts, spaghetti, no-bake brownies, and other delicacies.

In the television era of *Leave it to Beaver* and *Donna Reed*, when cooking was seen as primarily a woman's role, girls filled most of the classes. But there were also boys who learned to cook for themselves.

In the 1950s, Harriet Christie directed the Home Service Department in Rapid City and Mae Bledsoe ran the program in the Northern Hills. Both women had been with the company for a number of years. They traveled throughout the company's service area demonstrating cooking techniques to school classes and groups of homemakers. Working closely with the retail sales department, they helped promote the use of electric appliances.

Black Hills Power & Light fed the demand for power by selling appliances and demonstrating their use to housewives. The company also marketed to a new generation of consumers in the early 1960s by offering summer cooking classes for pre-teen children.³⁸

A growing industrial base across the Black Hills also added to the demand for electric power. In 1960, for example, the Homestake Mining Company, which was Black Hills Power



& Light Company's largest customer, announced a \$1.5 million expansion of its operations in Lead - a project that increased Homestake's electric energy requirements by 9 million KWH per year.39

Ben French Power Plant began commercial operations in January 1961. Early on, the Ben French Power Plant primarily provided system stabilization rather than base load power.

Building the Ben French Station

By the end of the 1950s, growing demand and competition from Missouri River power led Black Hills Power & Light to make a bold move. At the 1959 shareholders' meeting, Neil Simpson unveiled a model for a new \$5 million power plant to be built adjacent to the state cement plant in Rapid City. Carrying an initial 22,000 kilowatt (KW) capacity and including a mechanical dust collector to help reduce air pollution, the power plant would be named for the company's chairman, Ben French.⁴⁰ One Rapid City Daily Journal editorial noted that the plant represented "the largest single enterprise of a private business in this area since the railroads came in." The editors heralded the "firm" power supply that the plant would produce, comparing it to the water-dependent power produced by the Missouri River hydroelectric plants. The Journal also called it appropriate that the plant would be named for French, who had "anticipated the future for this area and contributed to a far-seeing expansion plan for the power company."41

With a gold-plated shovel, Ben French broke ground for the new plant on April 29, 1959 some 30 years after his arrival in Rapid City.⁴² The company used the occasion to review its growth since 1929, noting that the population within its service area had increased from 23,000 to 95,000. The company's peak system load had grown from 2,200 to 68,295 KW.

EXPANDING THE ENERGY HORIZON

Kilowatt hour sales had risen from 6,256 to 314,649. Yet none of this growth increased prices — in fact, costs for electricity had fallen steadily from \$7.21 per KWH in 1928 to only \$1.90 in 1958. Black Hills Power & Light's corporate contribution to the common good grew in tandem with this prosperity, as the taxes it paid increased from \$31,600 to \$1,259,000 during that same period.⁴³ By 1960, the company was poised to continue its growth, launching commercial operations at the Ben French station less than two years after the groundbreaking.44

As the Korean War raged throughout the early 1950s, it drove inflation that affected industries and consumers across the country. Black Hills Power & Light held rates steady from 1947 until 1958 but sought a 5 percent increase from the WPSC and various cities that regulated service in South Dakota that year. Simpson told reporters that the company needed the increase because growing operating costs had begun to eat into earnings, which limited the company's ability to attract capital to develop power plants and other facilities. "To assure continuing and adequate service," Simpson said, "and to preserve the financial integrity of the business, it is essential that we obtain rate relief at this time."45 Regulators approved the company's request and the new rates became effective in South Dakota in April 1958, although it took until the following February to get approval in Wyoming.⁴⁶

After it became operational, the new Ben French power station lowered the company's generation costs while the rate increase flowed to the bottom line. Together, these changes improved earnings, and by the middle of 1962, Black Hills Power & Light had increased its annual revenues to \$8.38 million. It served 120,000 people in 18 incorporated communities in and around the Black Hills as well as in many rural areas in South Dakota and Wyoming. About half of these people lived in, or did business in, Rapid City, while 13 percent lived in Wyoming.47

The company's investment in Wyodak was also paying off. By 1962, the coal from that plant produced operating revenues of \$618,000 – 85 percent of which came from Black Hills Power & Light.⁴⁸ Overall, the company had come a long way during French and Simpson's 20-year reign.

Returns for Shareholders



CEO Neil Simpson was a strong and personable leader. He resisted a number of efforts to expand the government's role in the power industry.

EXPANDING THE ENERGY HORIZON

Leadership Changes

Neil Simpson ran the company with a strong hand, but by the early 1960s, another figure emerged as a corporate leader. Robert "Bob" Asheim was effectively Simpson's chief operating officer. As one long-time employee remembered, he "was in charge of everything that Neil wanted him to do."⁴⁹

With intense blue eyes and thick, crew-cut hair, Asheim had grown up in Elm Springs, South Dakota and graduated from New Underwood High School.⁵⁰ He worked briefly for Black Hills Power & Light while he was a student at the newly renamed South Dakota School of Mines & Technology, where he graduated in 1944 with a degree in electrical engineering.⁵¹

With World War II still underway, Asheim had joined the Navy and then returned to Black Hills Power & Light as a distribution engineer in November 1945. Over the years, he climbed the corporate ladder, serving as a local manager in the company's distribution department in Rapid City from 1950 to 1953.⁵² In January 1954, he was promoted to systems manager of engineering and operations.⁵³ Like many members of Black Hills Power & Light's leadership, Asheim was active in the community and in local politics. He was elected to the Rapid City City Council in 1962, where he worked to bring more efficiency to city government.⁵⁴ He also developed a deeper knowledge of local politics.

Campaigns to Win Elections

Even though South Dakota law prohibited cities from offering exclusive franchises to utilities, electric companies like Black Hills Power & Light still operated with the approval of local governments. As a result, the company periodically turned to voters in local communities to renew its franchise. Sometimes these elections went smoothly, as was the case in May 1961, when the citizens of Whitewood unanimously approved a new 20-year franchise for the company.⁵⁵ Other times, as in Rapid City during the 1930s, the company fought to earn a community's approval.

As these elections became more important, the company's executives looked for someone to coordinate community outreach and maintain good public relations. One day in 1962, Asheim stopped into the county extension office in Sturgis to talk to one of the agents, a young man named Joe Rovere. Born in Lusk, Wyoming on the same day a cyclone wrecked his parents' homestead, Rovere had grown up in Lead and on a small farm in Boulder Canyon. He graduated from Sturgis Brown High School in 1947. After health problems forced him to drop out of South Dakota State University, he returned to Sturgis and took a job with the extension service. Over the next dozen years or so, he became a familiar figure in and around the northern Black Hills. Believing Rovere would be the perfect individual to help carry the company's message to the people, Asheim and Simpson hired him.⁵⁶

Rovere spent much of his time speaking to service groups about the differences between shareholder-owned utilities and rural electric associations. He also handled elections, as was the case in 1964, when voters in Hot Springs went to the polls to decide whether to give Black Hills Power & Light a franchise. Opponents ran newspaper ads suggesting that a franchise would diminish the city's bargaining power when it came to rates and services.57 They proved successful, and voters rejected the franchise 610 to 513.58 Despite the loss, the company publicly thanked its supporters, promising that "Black Hills Power & Light Company will work tirelessly to give the people of Hot Springs the best possible service at the lowest possible cost." 59

Black Hills Power & Light also sought to renew its franchise in Newell, Sturgis, and again in Hot Springs a year later. Making its case, the company stressed continuity and reliability and the trust it had cultivated over the years. Printed brochures

highlighted the fact that charges per kilowatt hour had declined almost 30 percent from 1941 to 1965. The company also emphasized how the taxes it paid supported schools and local government.⁶⁰ In each of these elections, the company won by an overwhelming margin.⁶¹

Average Cost per Kilowatt Hour





The average cost per kilowatt hour for residential service in Sturgis in 1941..... was 3.92 cents in 1965..... is 2.79 cents

The average cost per kilowatt hour of electricity used in Sturgis homes now is less than



what it was in 1941 !

DURING THIS PERIOD THE COST OF LIVING HAS RISEN GREATLY.

VOTE ... 'FOR' ... APPROVAL ON FEB. 8

The retail price of electricity fell steadily throughout the 1950s. Campaigning to win franchise renewals, the company touted the efficiency of its operations.

EXPANDING THE ENERGY HORIZON

New Controversies, Old Themes

The development of public power on the Missouri River continued to put pressure on Black Hills Power & Light in the 1960s. In 1961, REA-financed cooperatives in western South Dakota negotiated a federal contract to power the Minuteman Missile sites that dotted the western half of the state. This decision frustrated Simpson, who "[could not]

see any justification for this line," he wrote. "Our company already has transmission facilities from Rapid City to Newell to carry power loads of the missile sites," he continued, and Black Hills Power & Light complained that government's agreement with the cooperatives would cost taxpayers \$10 million more than what it would have cost the company to provide this service.⁶² Simpson asserted that officials in the REA and the Bureau of Reclamation had pressured the Air Force to negotiate with the cooperatives. "Those planners are the leftist-types who believe that a big brother centralized government knows what is best for the individual, and, to them, cost is no object," he seethed.63

Rural electric cooperatives were thriving by the mid-1960s. Their national association fact book noted in 1965 that 5.2 million Americans living in rural communities were receiving electric service from local and regional cooperatives.

Simpson's frustration was undoubtedly exasperated by his recognition that Black Hills Power & Light was highly vulnerable to decisions made by the federal government. In 1961, the Department of Defense allowed its ten-year contract with Black Hills Power & Light for Ellsworth Air

Force Base to expire, choosing instead to contract with the Bureau of Reclamation.⁶⁴ This loss was compounded several years later, when Secretary of Defense Robert McNamara announced the closure of the army depot outside of Edgemont, where nearly 1,300 people had been employed during the Korean War. Although employment at the depot had declined after the end of the Korean conflict, the closure still dealt a blow to the local economy.⁶⁵

In this political environment, the company had to walk a delicate line. While the company continued to compete with rural electric cooperatives for customers, for example, it had good business and political reasons for collaborating with the federally supported rural electric cooperatives on the development of infrastructure. Black Hills Power & Light and the cooperatives sought to integrate their transmission systems, for example, so they could turn to one another in the event that power plants went down or demand spiked. In 1963, Black Hills Power & Light helped launch the Mid-Continent Area Power Planners (MAPP), an organization that included 39 power suppliers from 10 midwestern states and Manitoba. Black Hills Power & Light connected to this network via a transmission line running from Rapid City to the Oahe Dam. The company was also active



in the Rocky Mountain Power Pool, connecting to this system via a 161 KV transmission line to the Consumers Public Power District at Chadron, Nebraska, from which Black Hills Power & Light regularly purchased power in the early 1960s.66

With the roles of public and private capital in the development of electric service already under scrutiny, the compensation of corporate officers made headlines. In 1964, the board of Black Hills Power & Light decided to sell up to 10,000 shares of common stock to key employees, who would pay at least 95 percent of the shares' market value. But this compensation strategy, designed to align management's interests with shareholders, had to be approved by regulators at the Federal Power Commission (FPC).

The FPC rejected Black Hills Power & Light's proposal in June 1964. In a 3-2 decision, the commission asserted that stock option plans "tend naturally to divert management from their responsibilities to the public and to focus their attention on maximizing prices and earnings in order to push stock quotations ever higher." The commission also argued that stock incentives could overcompensate executives compared with lower and middle management, leading to possible morale problems.⁶⁷



Public communications helped customers understand the process of generating electricity from coal in the mine to power in the home.

Regulators Deny Compensation Plan

The FPC decision reflected the increasingly prevalent view among some regulators that their duty to guard the public interest allowed them to overrule the business decisions of management and boards of directors. This attitude frustrated executives and directors, who believed that while regulators were entitled to set rates and monitor the cost and quality of service, the distribution of profits to shareholders and employees should be up to them. Shareholder-owned utilities argued that regulators would eventually discourage investors from contributing new capital if



Window-mounted air conditioners became wildly popular in the late 1950s. Customers were invited to "take the simmer out of summer" with this 1964 billboard.

they did not balance the rights of shareholders with the rights of consumers and the public interest. This tension between the public interest and the role of private capital heated up throughout South Dakota as rural cooperatives and shareholder-owned utilities competed to serve growing communities in the 1960s.

Territorial Dispute Heats Up

Through the 1950s and 1960s, the consolidation of South Dakota farms and ranches was evident in the relocation of many residents from rural areas to nearby towns and cities. Indeed, South Dakota farms and ranches grew in size but decreased in number, leaving shareholder-owned utilities and cooperatives scrapping in a bitter territorial dispute. The federal government had created the REA to serve rural communities. Under South Dakota law, these were defined as having fewer than 1,500 people. As towns served by rural electric cooperatives surpassed that threshold or were engulfed by nearby cities, the electric cooperatives and shareholder-owned companies argued over who had a legitimate right to serve them.

The cooperatives sought to protect their markets in the South Dakota legislature. In 1959, the State Senate passed a cooperative-supported "fair play" bill, but the House sent it to the Legislative Research Council for examination, stalling it until its demise.⁶⁸ In 1961, the cooperatives lobbied for a new bill that would allow them to continue providing service even after a town's population exceeded 1,500 people or when rural areas were annexed by larger cities. When numerous municipalities resisted the bill because cooperatives paid far less in taxes than shareholder-owned utilities, the REA pursued a companion bill that would allow annexing cities to charge a 2 percent tax on the gross revenue of the cooperatives. Compared with the 8 percent cities charged shareholder-owned utilities, this was hardly persuasive. The bills were defeated after a two-and-a-half-hour debate on the floor of the State Senate.69

EXPANDING THE ENERGY HORIZON

The debate continued, and the issue once again came before the state legislature in 1963. This time, the bill passed and shareholder-owned companies gained the advantage: when a town annexed an adjacent community, the electric service provider with the majority of customers would have the right to purchase the facilities of the other provider.⁷⁰

Outraged cooperatives called the legislation "foul play" and vowed to overturn it. Black Hills Power & Light ran newspaper advertisements throughout the region describing the situation as "A Race That Nobody Wins." High taxes on utility company profits were invested in cooperatives that wanted to compete with the shareholder-owned utilities, the company argued, creating a situation where "everyone's energy in running it is wasted, when that effort could be used in profitable activity where everybody benefits."71

The cooperatives tried unsuccessfully to amend the law in 1964. As the issue became more partisan, Democrats generally lined up with the cooperatives and Republicans sided with the shareholder-owned utilities. Republican gubernatorial candidate Nils Boe tried to broker a compromise saying that the state was becoming divided and that people were "climbing the walls" during legislative fights over the power struggle. But the battle continued.⁷²

Elected in November, Boe resolved that he would find a way to broker a compromise between the cooperatives, the shareholder-owned utilities, and the municipal companies. Even before the legislature convened, he orchestrated a series of meetings that aimed to revise the law. In February 1965, with the legislature in session, all parties announced an agreement to support a new law that would create a board of arbitration supervised by a circuit court judge to resolve territorial disputes. The measure was adopted by the legislature and signed by the governor.⁷³ But once again, it was clear to Black Hills Power & Light employees that the company's fate depended on the decisions of policymakers, and customers were important as both consumers and voters.



A RACE THAT NOBODY WINS

We all semember Black Sambo and the topy and laster they were around the tope until the into butter!

Our profil incentive, free enterprise system finds itself in the same un-ending most

If a business service a profit , the profit is travel ,, the trave on to be heleral government. The federal government in weak the traves in "non-profit" businesses that complete with the traversess, making it more difficult to earn a profit — NO PROFIT, NO TAXIDE!

WA Coops are an example of "non-profit" hey were started and are sponsored by the govern r bands electric service in rund, areas, but more orders want to use this advantage to compete with t essimanaged, tar-paying electric utilities.

This is a race that noticity wins. Furthermore, everyone's energy in running it is wasted, when that effort could be used in probable activity where everybody benefits.



Frustrated with the use of tax dollars to support cooperatives who competed against shareholder-owned utilities, Black Hills Power & Light ran ads describing this competition as "A Race That Nobody Wins." The company compared the situation to a popular children's story of four hungry tigers who chased each other around a tree until they all melted into a pool of butter. Originally set in India, the story was later criticized for perpetuating stereotypes of African Americans.

Public Power Leads to New Threats

Unfortunately, as the hydroelectric turbines at the Big Bend Power Plant began to turn in 1966, the controversy over public versus private power continued. Within two years, the major dams on the Missouri River were generating 10.2 billion KWH of power, and public policymakers wanted to deliver that electricity to major public institutions that had long been served by Black Hills Power & Light.⁷⁴

In 1968, the company went to court to block South Dakota from entering into an agreement with Rushmore Electric Power Cooperative that would have allowed the cooperative to provide substations and transmission lines to carry Bureau of Reclamation power from the Missouri River to the South Dakota School of Mines & Technology, Black Hills State College, the State Veteran's Home at Hot Springs, and Custer State Hospital. Black Hills Power & Light argued that the 1965 law prevented this kind of competitive invasion. Fortunately for the company, the courts agreed.⁷⁵

Unfortunately, the 1965 law faced a legal challenge of its own. In December 1968, the South Dakota Supreme Court ruled that the law was unconstitutional because it gave non-judicial duties to a judge in violation of the state's constitution. Following the court's ruling, the law reverted to the so-called "foul play" language on the books in 1963, a decision that angered the cooperatives and put pressure on industry and political leaders to once again develop an equitable method for resolving territorial disputes.⁷⁶

In 1969, a new governor, Republican Frank Farrar, began his administration by proposing the creation of a gas and electric consumers' council. "We have given electric and gas utilities a quasi-monopoly," Farrar said, "and no protection for the public." The lack of regulation, he believed, bloated rates and constrained industrial development.⁷⁷ The proposed council would have the power to resolve territorial disputes and set rates. Meanwhile, State Senator Frank Henderson of Pennington County offered a different solution, drafting a bill that gave the South Dakota Public Utilities Commission the authority to regulate electric utilities.⁷⁸ Advocates for statewide regulation pointed out that only South Dakota, Minnesota, and Texas did not regulate gas and electric service at the state level.

The cooperatives attacked Farrar's proposal, accusing the governor of "selling out" to the private power companies.⁷⁹ Members "badgered [Farrar] in hearings on the bill and jammed his office with visitors in opposition to the proposal." ⁸⁰ According to the *Rapid City Daily Journal*, the bill was the "pivotal" measure of the 1969 legislative session and could "make or break" the new governor.⁸¹

To the general public, the issue was often confusing and complicated by the fact that the shareholder-owned companies and the cooperatives continued to work together to meet the need for power. Executives at Black Hills Power & Light were frustrated when some opponents of the bill, for example, sought to discredit the shareholder-owned utilities

by accusing the company of "colluding" with Rushmore Electric after the two utilities financed, built, and operated the power plants at Osage and Kirk.⁸²

On the first roll call in the State Senate, Farrar's plan failed by one vote, so proponents amended the bill to satisfy one state senator. The next week, the bill passed narrowly. Known as the Consumer's Protection Bill, the measure cleared the House and was signed by the governor, creating the South Dakota Gas and Electric Consumer Council, a body charged with regulating 79 utilities in the state, including the seven shareholder-owned, 34 cooperative, and 32 municipal electric service companies.⁸³

Seeking to resolve the tensions between themselves and the cooperatives, Black Hills Power & Light had supported the governor's proposal. But before Farrar's ink had dried, opponents promised to gather signatures to put the new law before the voters. The governor's popularity entered a "drastic skid" following the bill's passage, and in June, opponents submitted the requisite petitions to send the bill to a statewide referendum.⁸⁴ Rapid City attorney (and future U.S. Senator) James Abourezk predicted that the voters would "overwhelmingly" overturn the measure, but before they had a chance, the legislators repealed the law early in 1970. This sent everyone back to the drawing board.⁸⁵

While Black Hills Power & Light struggled with regulatory issues, the economic legacy of the 1960s also presented challenges. The closing of the munitions depot in Provo had contributed to a substantial loss of population in the southern Black Hills. Despite continuing migration from the countryside to Rapid City, the city's population had increased by less than 5 percent in a decade. Although the company's annual reports highlighted good news, residential energy sales grew very slowly between 1964 and 1967, and total energy sales actually declined.⁸⁶ In the summer of 1969, however, a series of corporate announcements seemed to promise a brighter future in the decade ahead.

The good news came first from Minneapolis. Control Data Corporation, a booming electronics firm, said it would build a major manufacturing facility in Rapid City. Meanwhile, with gold prices at record levels, the Homestake Mining Company told the public that it would begin a five-year, \$8 million effort to expand its operations in Lead, including sinking a shaft from the 4,850-foot level to the 7,400-foot level to explore for ore well below its existing operations.⁸⁷ In August, Senator Karl Mundt was on hand for the Rapid City groundbreaking for an \$8.5 million pilot plant to convert lignite, a low-grade form of coal, to high-quality pipeline gas, a project expected to employ more than 100 people.⁸⁸ These new investments held out hope for substantial economic growth and well-paying jobs.

The announcements also foreshadowed a growing demand for power, and Black Hills Power & Light would need new facilities to meet it. But with the United States engaged in a growing conflict in Vietnam and increasing social upheaval at home, the economic climate was changing. The 1970s would include some of the hardest years in the company's history.

EXPANDING THE ENERGY HORIZON

"As this new unit went 'on the line'...the attention of many in the electric industry was turned toward Wyodak, awaiting operating results. Power generation in this area could be on the threshold of a revolutionary change."

RAPID CITY JOURNAL

The 1970s were an uneasy time for the United States and the electric utility industry. Demand for electric power soared alongside prices and interest rates. Technological improvements slowed, while growing concerns about the environment prompted Congress and many states to pass laws that forced industry to invest in expensive technology to reduce pollution. Whirlwinds of social and economic change swirled through the northern Great Plains. Black Hills Power & Light struggled to evolve to meet these new demands as well as shareholders' expectations. As the company sought to profit from its greatest physical resource — Wyodak coal — it approached the brink of disaster.

CHAPTER FIVE





For years, the Wyodak Mine struggled to meet its full potential because the site lacked a water source for cooling and because the region had a small power market. Water was in such short supply that the City of Gillette had to pump it in from Hulett, Wyoming to serve the city's residents. Starting in the 1950s, Black Hills Power & Light began looking for new technologies that would allow for the construction of a power plant at the

After experimenting for years with the concept, Black Hills Power & Light began construction in July 1968 of a 20 MW coal-fired steam turbine power plant with an air-cooled condenser. Initially called Wyodak 5, the plant was later renamed Neil Simpson I.

mouth of the mine that wouldn't need water for cooling. In the course of this search, Ben French visited a number of oil company compressor stations and observed air-cooled heat exchangers being used in remote areas. He was convinced that Black Hills Power & Light could use a similar system.

In 1960, the company decided to experiment. In Rapid City, the company had a conventional 3,000 KW condensing turbine, which was slated for retirement due to high fuel costs. The company moved this turbine from the Canal Street Plant to Wyodak, where the conventional condenser was replaced with air-cooled, fin tube sections. Between 1962 and 1965, the company operated this turbine successfully while collecting data that could be used to design a larger-scale plant. Meanwhile, in Germany, a manufacturer had already developed an air-cooled condenser, which held two advantages over the Black Hills Power & Light turbine at Wyodak. First, it had an elliptical tube design that provided greater thermal efficiency and longer life. Second, the unit had a patented flow arrangement that prevented the condenser from freezing during the winter — a critical feature in northern Wyoming. Vice President of Engineering Harry Babbitt visited six German plants in 1966 to observe these air-cooled condensers. Impressed, he recommended that Black Hills Power & Light incorporate the West German technology of Stearns-Rogers at Wyodak.

At a press conference in the summer of 1967, Neil Simpson stood with Wyoming Governor Stanley K. Hathaway and announced a plan to build a new, 20 megawatt (MW) power plant at Wyodak. The plant would cost \$5 million and

include the first air-cooled condenser in the United States. Although expensive to build, the plant's design offered longterm operational savings by eliminating the need to supply, store, and treat condensing water.

With Stearns-Rogers overseeing the project, construction began in July of the following year. In September 1969, Franz Schulenberg, the president of the West German firm, arrived to monitor the installation of the air-cooled condensers. The facility's Number 5 unit began production that September, and the new plant — named after Neil Simpson — was formally dedicated on July 17, 1970 with Governors Farrar and Hathaway in attendance.

The success of the air-cooled technology at the Neil Simpson Station held great promise for the future, with the *Rapid City Journal* opining that "power generation in this area could be on the threshold of a revolutionary change." The new technology gave the company greater flexibility to locate plants near coal rather than near water and dramatically reduced the cost of fuel for power generation.



The new Rushmore Mutual Life Insurance building at Ninth and Kansas City streets in Rapid City offered room to accommodate Black Hills Power & Light's growing central office staff.

EXPANDING THE ENERGY HORIZON

Convincing the Partners

The success of the new Neil Simpson Plant created an opportunity to build larger, aircooled plants at Wyodak to take advantage of the company's coal supply. But demand for power in the Black Hills region was not rising fast enough to justify the construction of a major new power plant. The company needed a partner with a larger market.

Pacific Power & Light was one of the largest electric utilities in the Pacific Northwest. In 1954, the company had merged with Mountain States Power, acquiring service territories in Wyoming. Two years later, the company discovered coal seams north of Glenrock and built the water-cooled Dave Johnston Power Plant along the North Platte River. Launched in 1958, the plant proved the cost effectiveness of minemouth, coal-fired generating facilities.¹

Neil Simpson hoped to interest Pacific Power in the idea of building a larger air-cooled plant at Wyodak by offering them a very good deal on coal. Pacific's engineers were skeptical of the air-cooled technology, and the company hesitated to invest in a plant so far from its main service territory.² Along with Simpson, Bob Asheim; David Morrill, Black Hills Power & Light's outside counsel; and George Locke, the company's chief financial officer, played critical roles in these



Visitors touring the new Wyodak 5 plant (Neil Simpson I) in 1969 learned about the advantages of locating a power plant close to the source of the fuel.

negotiations, which continued for months in Portland, Oregon; Rapid City; and New York City. The Black Hills team was small, while Pacific Power brought various departments to the table. Locke described the complexity, stating that, "you might visit with one group of people, then meet with another group, and they'd have no idea what you were talking about."³

Ultimately Simpson, Asheim, Morrill, and Locke won the day, and on August 12, 1971, the two companies announced the construction of a \$60 million, coal-fired, steam-electric generating plant at Wyodak. The deal included transmission lines extending west to Pacific Power's system and east to connect with Black Hills Power & Light. Designed and engineered by Stone and Webster, the facility would be the world's largest pulverized coal-fueled, air-cooled steam power plant. Black Hills Power & Light also announced plans to build a new 318-mile, 230 KV transmission system connecting Wyodak (and Pacific Power) with Rapid City before extending to Stegall, Nebraska, where the new line would tie in to the Bureau of Reclamation's system. This transmission system would allow the company to move large blocks of power to load centers, purchase power from other suppliers, and wheel power for the rural electric cooperatives in the region.

Black Hills Power & Light and Pacific Power hoped to begin construction by 1973.⁴ Searching for additional partners, they invited Tri-State Generation & Transmission Association, Incorporated; Rushmore Electric Power Cooperative, Incorporated; Nebraska Public Power District; and a number of Wyoming municipalities to join the project. Public Service Company of Colorado had expressed interest, but only if there was a way to transmit electricity from the plant to Colorado.⁵

In the fall of 1972, Simpson told the chamber of commerce in Gillette that the new 330 MW facility would be 15 times larger than the existing Neil Simpson Station. Over 600 people would be involved in construction, he said, and the permanent workforce would be about 60 people. Simpson hoped that construction would start in 1973 and be completed by early 1977, but he was quickly disappointed.

The development of a major oil field near Belle Creek in southeastern Montana in 1968 created an economic By January 1974, the estimated cost of the project had more boom. The company supplied power to than doubled to \$134 million, and Pacific Power's executives the oil field operations, as well as the began to get cold feet.⁶ Locke remembered that Asheim growing needs of the city of Gillette. came into his office on several mornings, exasperatedly declaring that "I've just been on the phone for over an hour with Pacific. They want to cancel construction of the Wyodak Plant. I've got reservations on the 12:30 plane." Asheim would spend several days in Oregon fighting to keep Pacific Power from backing out.⁷

By August 1974, the project's cost projections were over \$166 million, and the price still didn't include all of the environmental equipment that would need to be installed.⁸ In the meantime, Black Hills Power & Light faced challenges back home.

As inflation took hold during the 1970s, shareholder-owned utilities in South Dakota struggled to keep up with rising costs and sought to raise their rates. In an environment where cities regulated rates without any state oversight, the companies had to go to each city council, demonstrate the need for an increase, and hope that prudence would win over politics.



Campaigning for Regulation

EXPANDING THE ENERGY HORIZON

Huron-based Northwestern Public Service Company (NWPS) ran into trouble in 1973 when it adopted a 15 percent increase without first securing approval from municipalities. The company had followed a similar procedure before, asserting that it had the authority to adopt the new rates pending a hearing and decision by the individual cities. But this time, six cities banded together and hired

Right: In 1971, the press and President Nixon warned of a looming energy crisis. Black Hills Power & Light advertisements reassured customers that the company had plenty of fuel and power.

former Federal Power Commission Deputy Counsel Reuben Goldberg to handle their case. "He was a classy old guy," said Everett "Ev" Hoyt, who was an NWPS attorney at the time, "and they nailed Northwestern's hide to the wall." 9 On February 20, 1974, a circuit judge found that cities had to hold a hearing and make a decision on proposed rate increases before they could be put into effect. The judge ordered NWPS to refund the excess revenues it had collected — plus interest.¹⁰

Under increasing financial pressure and unable to get timely rate relief, NWPS reached out to South Dakota's other shareholder-owned utilities to support a push for regulatory reform.¹¹ They also turned to the electric cooperatives, and together, the companies went to the legislature in 1975 with a bill based on a recently-enacted Minnesota law empowering the state to regulate utilities. Municipalities immediately attacked the bill because they hadn't been consulted. The cities that had challenged NWPS's rate increases were concerned that the proposed legislation would trump their ongoing proceedings.¹² The utility companies promoted the bill by claiming it would "finally put to rest the long-standing feud within the industry over regulation and territories of service." 13

"There is no issue in the state," said Rep. Joe Barnett of Aberdeen, "that is more emotional and more sharply divisive than the public versus private power question." With legislators hoping to finally resolve this debate, the bill passed in the spring of 1975.¹⁴

Signed by Governor Richard Kneip, the new law vested the South Dakota Public Utilities Commission (SDPUC), rather than cities, with the responsibility for setting electric rates. Building on the "Fair Play" bill enacted in 1965 to resolve territorial disputes between the shareholder-owned utilities and the cooperatives, the new law also gave companies one year to resolve territorial issues via negotiations. If negotiations failed, the law empowered the SDPUC to determine territorial boundaries.¹⁵

While the compromise bill improved relations between the shareholder-owned utilities and the cooperatives, it did not resolve many questions tied to public power. In the early 1970s, Black Hills Power & Light continued to negotiate with the State of South Dakota both in private and in the newspapers — over the issue of wheeling Bureau of Reclamation power to state institutions. The supply of electricity to the South Dakota School of Mines & Technology was a focal point of intense debates. In February 1973, the state and the company reached an agreement that would save taxpayers more than \$20,000 a month.¹⁶ Black Hills Power & Light officials were unenthusiastic about the deal, especially due to the fact that the state failed to recognize the full value of the services provided by the





There is no power shortage here! We've plenty of extra electric energy to supply our 130,000 people who enjoy fair-priced electricity. Power for our homes, industries, agri-business and travel-related business. Planning a new air conditioner? An electric heat-pump? Go ahead . . . install it! We've got all the power you need RIGHT NOW, and our studies to meet the area requirements through 1983 are complete, with management decisions made to initiate projects needed at that time. Our Wyodak coal reserves are super-abundant (200 years or more). If your plans require electric energy . . . you've got it!



PLENTY OF EXTRA ELECTRICITY HERE-USE IT AND ENJOY IT!



EXPANDING THE ENERGY HORIZON

company, including multiple sources of backup power and transmission, highly trained personnel, equipment, inventory, and a 24-hour maintenance staff. Nevertheless, they were glad to resolve an issue that had "plagued state officials, legislators, and our company for many years." In a press release, the company said, "we believe it to be in the best interest of all concerned to resolve this matter."¹⁷

While Black Hills Power & Light worked to reach agreements with its business partners, competitors, and customers in the 1970s, broader economic challenges intensified as a result of the tumultuous 1960s. Various civil rights movements gave rise to a host of efforts by minority groups to have their rights recognized by mainstream, white society. The availability of the birth control pill changed attitudes towards sex and marriage, and

increasing numbers of women sought work outside the home. Renewed attention to poverty and the election of Democratic Presidents John F. Kennedy and Lyndon B. Johnson shaped "Great Society" programs to help the poor. At the same time, American efforts to prevent the spread of communism deepened the government's commitment of troops in South Vietnam. When the baby boomer generation came of age, some protested the war while others fought in it.



These cultural disruptions

resonated throughout the United States, even in the deeply rural reaches of Black Hills Power & Light's intermountain service areas. Gradually, increasing numbers of women entered the company's workforce, oftentimes into what had been non-traditional occupations. The expense of the Vietnam War and Great Society programs exacerbated inflation, while social and political activism focused new attention on environmental and consumer issues.

Nationwide, concerns about pollution had been rising ever since Rachel Carson published Silent Spring in September 1962, a book that described the damage done by pesticides and popularized concern about the environmental effects of modern industry. In 1963, Congress passed the Clean Air Act, which set emissions standards for stationary sources such as power plants and steel mills, but did not address mobile sources of pollution like

VOTE FOR COLLECTIVE BARGAINING



For years Black Hills Power & Light Employees had rejected union representation. In the early 1970s, however, with many employees feeling the pressure of inflation-driven hikes in the cost of living and the company itself under increasing financial pressure, tensions between line workers and management increased.

Donning shirts emblazoned with the acronyms for both their company (BHP) and their union (IBEW), the Black Hills Power linemen's rodeo team posed with a trophy in 1989.

On March 21, 1973, production, maintenance, and construction employees of the company voted to choose the International Brotherhood of Electrical Workers (IBEW) – AFL/CIO to represent them in bargaining. Management and the business managers from the union were able to bargain constructively. Within months they had developed the company's first union contract, which became effective on November 1 that year.

Labor issues continued to be sensitive, especially when the company was forced to lay off workers. When Black Hills Power & Light closed down its appliance division and laid off both sales and service employees in the 1970s, the union worked with management to protect long-time employees. According to Joe Rovere, "the employees seemed to feel better about the fact that somebody else was representing them besides the company."

Growing Social and Environmental Concerns

War in Vietnam contributed to political, economic, and social turmoil in the United States. President Lyndon Johnson's efforts to pay for both the war and his Great Society program fueled inflation.

cars and trucks. As the public pressed Congress for heavier regulations on pollution, Congress banned the pesticide DDT — a central target of Carson's book — in 1969. The next April, millions of Americans participated in the first Earth Day celebration, and Congress established the Environmental Protection Agency. It also amended the Clean Air Act to impose national air quality standards and set deadlines for compliance. Later in the decade, Congress also passed the Clean Water Act.¹⁸

Black Hills Power & Light responded to the nascent environmental movement in various ways. In 1969, for example, the company filled the southern pit at the Wyodak Mine to its pre-excavation levels, poured on a layer of top soil, then planted prairie grasses and ground cover.¹⁹ The company also planned to incorporate the most advanced air quality controls available at the new Wyodak Power Plant. The environmental impacts of older technologies, however, raised serious challenges.²⁰ In Lead, for example, citizens complained that the Kirk Power Plant "belches smoke and soot daily."²¹ Joe Rovere met with a group of about 60 residents in 1974 and explained the situation. He conceded that the antiquated equipment at the Kirk Plant contributed to local pollution and noted that the company planned to close the plant in May 1977 after the new Wyodak plant was complete. Wyodak, Rovere reassured them, would include nearly \$40 million worth of pollution-control equipment.²²

Growing concerns about air pollution, however, prompted opposition to the construction of coal-fired power plants, which posed a serious threat to Black Hills Power & Light's primary business. Organizers in Montana, for example, tried to block a Montana Power Company's plan to add two coal-fired units that would have produced power for customers in the Pacific Northwest.²³ Fortunately for Black Hills Power & Light and its partners, Wyodak did not face similar opposition.

Developing renewable sources of energy offered one way to decrease fossil fuel emissions, and interest in renewable energy sources grew tremendously in the 1970s. The *Rapid City Journal* and other regional newspapers wrote of the potential for solar, geothermal, wind, and nuclear power. Meanwhile, environmentalists encouraged consumers to use less energy. Conservation became especially important when war in the Middle East sparked the nation's first energy crisis.

Energy Crisis Looms

On October 6, 1973, Saudi Arabia and other members of the Organization of the Petroleum Exporting Countries (OPEC) cut back oil shipments to the United States and Western Europe. Created in 1960, OPEC had never before wielded its economic power in this way, but when the Yom Kippur War broke out between Israel and a coalition of Egyptian and Syrian forces, OPEC reduced its oil shipments in retaliation for American support for Israel. This move sparked a fuel crisis and forced the United States to confront concerns over a larger, looming energy shortage. The following spring, OPEC lifted its sanctions, but by this time, oil prices had increased from \$1.77 a barrel to \$12 per barrel.²⁴ Across the country, the growing energy crisis brought financial calamity to the nation's electric companies. In the first six months of 1974, the nation's 50 largest utility companies were forced to increase their rates by an average of 55.4 percent.²⁵

Shortly after taking office in January 1977, President Jimmy Carter asked the American people to view the energy crisis as "the moral equivalent of war." In a televised address, he announced that energy conservation would be the cornerstone of his policy and quickly sent a bill to Congress

that incentivized conservation, introduced new gasoline taxes to reduce consumption, and removed price controls on natural gas and oil. The bill also nudged power producers towards domestic fuel, especially coal.²⁶

Coal production and consumption had been on a steady decline since World War II as the popularity of natural gas increased. The Arab oil embargo, however, sparked revived interest in the hard, black fuel. As Americans confronted their dependence on foreign oil, policymakers pointed out that coal accounted for 90 percent of U.S. energy reserves. Coal could also be mined and converted into energy more quickly and easily than building nuclear plants.

Carter's energy policy brought two additional laws in 1978. Both had an enormous impact on the electric utility industry — the Natural Gas Policy Act and the Power Plant and Industrial Fuel Use Act. Passed at a time when natural gas supplies were running low across the country, the Natural Gas Policy Act sought to deregulate prices, stimulate production, and promote the development of a national market. In the short run, this bill led to an increase in the price of natural gas and tended to lead power producers to look at other fuel options.²⁷ Likewise, the Power Plant and Industrial Fuel Use Act discouraged electric utilities and industrial companies from relying on natural gas or oil to fuel power plants, pushing them instead toward coal, nuclear energy, and other alternative fuels.²⁸

The prospect of nuclear energy development raised concerns for environmentalists and consumers, who were an increasingly important factor in the regulatory arena. In the 1960s, consumer watchdog groups in other industries organized citizens to fight against product defects, lobby Congress, and monitor the work of regulatory agencies. Ralph Nader's efforts at the federal level were copied by organizers in California and New York, where consumer groups put a spotlight on the work of public utility commissions.²⁹



Gas lines stretched around the block in communities across the country in 1973 after Arab nations imposed an oil embargo on the United States.

In South Dakota, utility consumers organized a number of different watchdog groups, including the South Dakota Consumers League. These groups raised public awareness and debate over proposed rate increases and regulatory policies. With more people at the table, rate cases took longer and increasingly exacerbated Black Hills Power & Light's financial issues. As the construction of Wyodak moved forward, for example, this pressure increased.

A Growing Financial Crisis At Home

The original financing agreement for the Wyodak Plant called for Black Hills Power & Light and Pacific Power to share construction costs on a 40/60 percent basis.³⁰ Under those terms, when the plant was completed, Black Hills Power & Light would be entitled to 40 percent of the plant's output, or 132 MW.³¹

At the end of 1974, executives at Black Hills Power & Light told shareholders that the previous year had been "one of the most challenging years in the history of our Company." In some ways, it was reminiscent of the early years of Dakota Power when everything had

been put on the line to create the generating capacity to carry the company forward. Inflation and new environmental regulations "caused a tremendous increase in the estimated cost of the [Wyodak] Plant," pushing its opening back to the spring of 1978.³²

These delays compounded problems for Black Hills Power & Light. Wyodak had been devised, in part, because new construction was smarter than retrofitting aging plants to meet the new environmental standards that were supposed to be implemented in 1977. Construction delays pushed Wyodak past this deadline, and the need to keep generating capacity online until Wyodak was completed forced the company to invest in pollution abatement equipment to keep the older plants operating.³³

Despite what Joe Rovere had told the residents of Lead, for example, the company had to postpone the closure of the Kirk Plant and install an electrostatic precipitator to clean its emissions at a cost of \$1.8 million.³⁴ The company had to install a new water treatment system to handle the ash.³⁵ Black Hills Power & Light also deferred plans to close the Ben French unit in Rapid City, which resulted in nearly \$2.28 million in cleanup costs. The company had already

investments between 1974 and 1978.³⁶

planned to spend \$3 million on electrostatic precipitators at Osage. Altogether, these

efforts totaled \$9 million, or about 10 percent of all of Black Hills Power & Light's capital



O Current Liabilities

Wyodak construction created a growing cash crisis as current liabilities rapidly outpaced current assets.

UNPLUGGING



To lower operating costs, Black Hills Power & Light closed its retail appliance business in 1974. The company laid off 17 employees who worked in showrooms in various offices around the Black Hills. For many people, closing the stores marked the end of an era.

For nearly 50 years the company's brightly lit window displays on Sixth Street in Rapid City and Main Street in other Black Hills towns had showcased gleaming new electric ranges, refrigerators, water heaters, air conditioners, washing machines, and dryers. Customers also purchased electric irons, mixers and other small appliances to make housework easier and more efficient.

Salesmen and advertisements touted the features of the latest Hotpoint models. A team of service men delivered, installed, and repaired electrical equipment in homes and commercial buildings throughout the region. With its exit from the appliance business, Black Hills Power & Light chose to focus on the company's core strengths: power generation, transmission, delivery, and customer service.



THE SHOWROOM

While new environmental standards demanded capital to retrofit existing plants, changes in demand also forced the company to revise its long-term plans. Air conditioning created new summer peak loads, which rose 13.8 percent between 1974 and 1975.³⁷ Similarly, in winter, electric heating systems increased demand, so the company purchased power for extra capacity. Power purchases, however, did not represent a long-term solution. The company needed more generating capacity of its own, but it also needed a way to finance growth.³⁸

The financial pressure continued to grow. To reduce overhead, in 1975, the company eliminated its merchandising operations and cut the workforce by 31 positions.³⁹ Employees could sense the company's financial strain because, as engineer (and future CEO) Daniel "Dan" Landguth noted, "it was affecting their pocketbook." "The company was holding checks to vendors. We were in really difficult straits."⁴⁰ Thomas "Tom" Ohlmacher, then the manager of the Kirk Plant, remembered that everyone was told to cut their budgets. Maintenance was reduced to "absolute bare bones."⁴¹

Facing these challenges, Black Hills Power & Light took Pacific Power back to the negotiating table. It was a precarious situation, and some thought Pacific Power would take advantage of the situation and acquire Black Hills Power & Light.⁴² Instead, the two companies signed a new agreement on Halloween, 1975, reducing Black Hills Power & Light's share of the funding for Wyodak from 40 to 10 percent. Pacific Power ticked up to 90 percent, but Black Hills Power & Light retained an option to increase its ownership to 20 percent before construction was complete, should things improve.⁴³ "If it wouldn't have been for Pacific and their balance sheet," Landguth said, "Black Hills would have gone under for sure."⁴⁴ As the financial crisis deepened in 1976, both Black Hills Power & Light and Pacific Power looked for outside help. That May, the two companies struck a deal with a group of outside investors and pledged an ownership interest in Wyodak as collateral.⁴⁵

With all this underway, Black Hills Power & Light submitted a request for an 18 percent rate increase to the SDPUC — its first under the new regulatory system established in 1975. Most of the increase was designated to pay for pollution-control equipment.⁴⁶ The company also exercised its right to begin collecting revenues under the proposed rate system, as long as it posted a bond to reimburse customers if the SDPUC rejected the increase.⁴⁷ That is exactly what happened. Four months later, the SDPUC granted only

Borrowing the language of the day, Black Hills Power & Light ads promoted the lineman as part of a team of service workers dedicated to helping the public. a 10.1 percent increase and ordered Black Hills Power & Light to reimburse consumers the difference. If there was any good news in the commission's decision, it came with the realization that the SDPUC had slashed other shareholder-owned companies' rate requests far more severely.⁴⁸

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The increase, however, was not enough. Although the SDPUC had authorized the company to earn a nearly 9.25 percent rate of return, by the spring of 1977, the company's actual rate of return hovered around 6.27 percent. That figure dropped even further, to just 4.84 percent, when other costs were applied.⁴⁹ Given that investors could earn better than 7.0 percent on government-backed treasury bills in 1977, the company faced the prospect of a significant decline in its share price and an inability to raise capital if the situation continued.

In March 1977, the company returned to the SDPUC with another request, this time for a 32.2 percent increase. The company explained that high inflation, the completion of the company's 230 KV transmission system, and the installation of new combustion turbines that could meet peak demands had combined to force Black Hills Power & Light's hand. But the biggest factor was the cost of pollution control equipment, which accounted for 71 percent of the proposed rate increase.⁵⁰ The SDPUC called for hearings on the matter and allowed the company to implement a fuel adjustment clause starting in July to help with cash flows.⁵¹ Finally, in September, the SDPUC granted a 21 percent rate increase, which the company hoped would generate approximately \$3.8 million in additional annual revenues.⁵²

These attempts to overcome the company's financial problems reflected the increasing market turmoil. In December 1977, Simpson and Asheim shared their frustration with shareholders, declaring that, "many conflicting interests around the whole subject of energy are combining to create confusion, frustration, and significant problems." ⁵³ Inflation, concerns over the environment, regulatory politics, a slowdown in technological innovation, and rising fuel costs all presented serious challenges. Much was riding on the big bet that the company had placed on the new Wyodak Plant.

Wyodak Generates Power at Last

Work on Wyodak continued in the face of financial turmoil. Bud Westre, the company's vice president of generation, collaborated with Pacific Power to integrate new technologies and ensure that the mine-mouth fuel concept would work as efficiently as possible.⁵⁴

On June 8, 1978 — nearly seven years after the first Wyodak plans were made public — the plant began to generate power. The cost had ballooned from an expected \$60 million to \$265 million.⁵⁵ By the end of the year, four natural gas-fired combustion turbines had been installed to provide reserve energy at Ben French. Meanwhile, Black Hills Power & Light began planning for additional 230 KV transmission facilities that would connect Wyodak, Osage, and Hot Springs.



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The same day that Wyodak went online, Black Hills Power & Light and Pacific Power sold the plant to an investment group, who then leased it back to the two companies to operate. This leveraged-lease agreement helped both companies manage their capital budgets and minimized the initial rate shock, spreading the invested costs over the life of the lease.⁵⁶ Under its terms, Pacific Power operated and managed the plant, while Black Hills Power & Light was entitled to 20 percent of the output and paid 20 percent of the lease rent along with associated costs of production.

The Wyodak Mine supplied coal to the plant under a 35-year agreement.⁵⁷ After several months of testing, the plant began commercial production in September 1978.

Neil Simpson Steps Down

The completion of the Wyodak Plant marked the conclusion of a difficult chapter in the company's history and came with significant changes in corporate leadership. On February 28, 1978, CEO Neil Simpson, then 65, retired after more than 40 years of service. Although he continued to serve as chairman, Simpson transitioned away from the company's day-to-day operations. Eight months later, Ben French passed away, and many employees and friends of the company considered these two events the end of an era.⁵⁸

Bob Asheim became CEO in 1978. By all accounts a good engineer and manager, Asheim was more reserved than his predecessor. He had spent years working behind the scenes, inching the company forward while Simpson paid attention to the morale and culture of the organization. Corporate leaders had recognized Asheim's key role in negotiating with Pacific Power and making Wyodak a reality — critical achievements that earned him respect.

Left: Completed in 1978, the 300 MW Wyodak Plant near Gillette was developed by Pacific Power & Light and Black Hills Power & Light.

Right: The Wyodak plant featured a new generation of electronic and computerized controls that allowed operators to monitor systems remotely. Duce in his new position, Asheim took advar number of recent retirements and reconfigur of directors. In the past, members of the boar

Once in his new position, Asheim took advantage of a number of recent retirements and reconfigured the board of directors. In the past, members of the board had been recruited from across the service territories of Black Hills Power & Light. As the company began to broaden its horizons, Asheim looked for more geographical diversity, which he believed would energize the board to play a more active role in the development of the company's strategy.⁵⁹

In 1979, the company added two new board positions. Reaching outside of Black Hills Power & Light's service territory for the first time in many years, Asheim recruited Dale Clement, dean of the University of South Dakota School of Business, and Paul Godfrey, a senior partner at a law firm in Cheyenne, Wyoming. He also asked Robert Knecht, president of Knecht Industries in Rapid City, and Reynold Klay, executive vice president of the National Bank of South Dakota, to join the board. At the same time, Larry Owen, the company's vice president for administration, was elected to the board.⁶⁰ All of these changes brought new vitality to the board's discussions of the future of Black Hills Power & Light.



Crisis in Leadership Forces Change

Unfortunately, Asheim seemed to withdraw after becoming CEO despite a long and visible role as vice president. Occasionally, he would bring the company's top managers together for a retreat at his cabin in the Black Hills, but increasingly he relied on a small group of advisors. Over the next two and a half years, communication broke down between the CEO and the board as well as between Asheim and those who reported directly to him, creating tension throughout the company's leadership team.

On September 15, 1980, after just two years as CEO, Asheim announced he would take early retirement. The board chose Larry Owen as his replacement.⁶¹ This move led to another

round of major personnel changes. The company's CFO, George T. Locke, replaced Asheim on the board of directors. Dan Landguth took Owen's old position as vice president for Administration, where he increasingly functioned as a chief operating officer. Meanwhile, Richard J. Tupper was named vice president of Corporate Development and vice president of WRDC. With this new team, Black Hills Power & Light began a new chapter.

Persistence and ingenuity carried Black Hills Power & Light through one of the most challenging eras in the company's history. Growing concerns about the environment, an energy crisis sparked by war in the Middle East, rampant inflation coupled with declining productivity, and technological stagnation in the electric power industry had all combined to put financial pressure on the electric utility business. A regulatory system slow to respond to rapidly rising costs in the industry squeezed profits. When regulators did grant rate increases, consumers, who were also feeling the effects of inflation, were understandably frustrated.

The news from the 1970s was not all bad. By the end of the decade, the number of Black Hills Power & Light

customers had grown nearly 30 percent, to 45,737. Energy sales had increased 81 percent. To meet this demand, the company had more than doubled its installed generating capacity to nearly 284 MW with contracts for an additional 22 MW in purchased power. Despite this growth, the company's workforce had only increased 12 percent to 385 employees. Earnings per share were up 35 percent compared to 1970. As Larry Owen told shareholders, there was still room for plenty of improvement in the return on common equity.⁶² With the completion of the Wyodak Plant, and the election of Ronald Reagan as president of the United States, the company and the nation moved into a new era that would bring its own set of challenges.



Bob Asheim became CEO in February 1978. A native of the Black Hills region and graduate of the South Dakota School of Mines & Technology, Asheim had been with the company since 1945.





On the night of June 9, 1972, a torrential rain dumped between seven and 15 inches of water on the Black Hills. Around 7:25 p.m., the weather service issued a flood alert as Rapid Creek swelled beyond its banks. Shortly thereafter, muddy water thick with debris strained the dam at Canyon Lake to its breaking point. The dam failed around 10:45 that night, and by the next morning, 238 people were dead.

Victims included several members of the Black Hills Power & Light family. A 75-year old former employee named Henry Hausmann perished along with his daughter and son.⁷ Elaine F. Smolnikar, who worked as a secretary for Bob Asheim, was carried away by the flood along with her husband at around 9:00 p.m. Elaine died wearing a Black Hills Gold ring that her colleagues had given her only weeks before.⁸

As the crisis grew on the night of the flood, city employees and volunteers helped neighbors, friends, and family members to safety. Joe Rovere, for example, drove to his mother-in-law's home and convinced her to abandon her small house near Rapid Creek.⁹ Meanwhile, as water approached his house, Black Hills Power & Light engineer Dan Landguth piled his family into their car. Landguth drove through the water, up a neighbor's driveway, and into the safety of their garage. A wall of water and debris tore trees and bridges from the earth and ripped homes and businesses from their foundations. When he was rescued early the next morning, Landguth could not believe the devastation. When he was finally able to check on his house, he found it still standing, but soaked with mud and water.

With utility infrastructure destroyed in many parts of town, Black Hills Power & Light employees mobilized at the company's headquarters on Sixth Street. Electricity was an essential service, and the company recognized its obligation to restore it as soon as possible. Working around the clock, employees inventoried lines and substations. A local restaurant served as an informal command post. Landguth remembered Neil Simpson stopping in to see how everyone was doing and hear their stories. He let employees who lost their homes return to their families. "I learned a life lesson from that," Landguth said. "Always put the priority of your people first."¹⁰

Larry Owen, meanwhile, had a sobering task. When word came down that Elaine Smolnikar — who had no local family other than her husband — was among the missing, he began visiting the makeshift morgues setup around town. He identified her upon seeing the gold ring she had been given by her friends at work.^{II}

Although the storm and the flood took out power in many parts of the Black Hills, the company's transmission network did not suffer major damage. In the weeks that followed, Black Hills Power & Light published notices advising customers to check their wires, fuses, and breakers before attempting to restore power. The company urged customers to avoid reconnecting damaged appliances or hooking a drop cord to their neighbor's house unless the electrical meter had been removed. Doing so could endanger the lives of repair crews.¹² Black Hills Power & Light also teamed up with Hotpoint to offer victims new, low-cost appliances.

The flood changed Rapid City forever. Much of the floodway was turned into a permanent greenway and memorial park. Fortunately, many local tourist attractions — which were vital to the local economy

— survived the flood unscathed. Recognizing this, Black Hills Power & Light sought to reassure stockholders and spread the word that, as Neil Simpson put it, "one important way . . . you can help is to let your friends and associates know that the . . . tourist attractions in the Black Hills" were still available.¹³

Torrential rains broke Canyon Lake Dam and sent a wall of water through Rapid City. The flood took 238 lives and destroyed hundreds of homes.

still available.¹³ Along with their customers and neighbors, the people of Black Hills Power & Light would spend years putting their lives and communities back together. The 1972 flood was a devastating and defining moment for Rapid City and the Black Hills. It tested Black Hills Power & Light's commitment to disaster response and recovery — a challenge the company met with dedication and compassion. Indeed, the company that would soon become Black Hills Corporation would help customers across

would soon become Black Hills Corporation would help customers across its service territories rebound from fires, floods, blizzards, and tornadoes in the years following the flood.



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LARRY OWEN, CEO, BLACK HILLS CORPORATION

The completion of the Wyodak Plant afforded Black Hills Power & Light a moment to stop and take a breath going into the 1980s, a time when the company had strong cash flows and a welcome slowdown in inflation and interest rates. Evolution in this era meant diversifying into new lines of business. But understanding the sources of competitive advantage in different industries and markets was not easy. Success was often coupled with disappointment. A period of almost naïve experimentation taught the company's leaders useful lessons.

CHAPTER SIX

RESPONSIBILITY **DOWN THE LINE**

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arry Owen was not an engineer and he had not spent his entire career in the utility industry. In this sense, he was very different from his predecessors. Born in Lincoln, Nebraska on New Year's Day in 1928, Owen served as a hospital corpsman in the United States Navy during World War II. After the war, he studied business administration at the University of Nebraska. He spent two years as a management trainee with J.C. Penney Co. and then worked for 17 years for various chambers of commerce. In 1956, he became manager of the Rapid City Chamber of Commerce, where he associated closely with Neil Simpson and Bob Asheim. Ten years later, Owen left to become executive vice president of the chamber of commerce in Cedar Rapids, Iowa. But the Black Hills drew him back.¹ In 1970, he was named vice president of Marketing for Black Hills Power & Light.

A tall man with high energy and a big laugh, Owen offered a breath of fresh air to the company's employees. His background in business management and civic affairs led him to focus on Black Hills Power & Light's culture and organization. It was also natural that he worked to build

bridges with the community. In many ways, he was the right person for the moment. The 1970s, after all, had taken its toll on external relations. Rate increases had not endeared the company to consumers, while tight budgets limited salary increases, hurting employee morale.

Soon after taking over, Owen undertook a corporate reorganization. He expanded the administrative staff and fostered teamwork, pushing decision making closer to the line. He hosted all-day quarterly management meetings at the Hotel Alex Johnson in Rapid City, allowing people from different parts of the organization to build comradery. In speeches to employees and others in the industry, he said, "We will honor all voices in our corporation. The truth can arise from anywhere, anyone, and we'll hear everyone in this process. None of us claims to have the perfect vision" for the company.²

Owen believed employees had an obligation to ask tough questions. Under his leadership, the company began to share more information, including financial data, with employees, and supervisors were brought into the budgeting process.³ The new expectations "changed a lot of middle management people," said Jim Emery, who was a regional manager for the southern Black Hills at the time. "Before that, lots of people thought you weren't supposed to do anything until someone told you to do it. Then, under Larry Owen, you went to work thinking you're the one that's going to make it happen."⁴

As part of that cultural transformation, Owen also promoted the idea that if employees worked hard for the company's success, the company would take care of its people. He

Larry Owen became president and CEO in 1980. As a leader, he tried to empower employees and build stronger teams throughout the company.

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pushed for the creation of the Employee Assistance Program to help workers cope with personal and family issues.

Owen had a different philosophy when it came to public relations. His predecessors had sometimes micromanaged what information was given to the media. Larry told Joe Rovere, "Just get to them in a hurry." He wanted the media to believe that the company was accessible and open and called Rovere his "one-man army." 5 He also worked to ensure that the public and regulators understood the company's cost structure and the nature of its capital-intensive business.

As they were designing and building the Wyodak Plant, Pacific Power and Black Hills Power & Light had anticipated the construction of a second 330 MW plant. They even pre-designed the site for an expansion, making the water treatment system and environmental ponds large enough to handle both plants. By the time Wyodak was completed in 1978, however, "the world had changed," according to Dan Landguth. In the wake of the energy crisis, demand dropped, and Pacific Power no longer needed another plant.

Black Hills Power & Light, however, was already operating at near-peak capacity.⁶ To keep pace with demand, the company nursed along inefficient plants like Kirk. With Pacific out of the picture, Black Hills Power & Light announced in 1978 that it would begin planning the construction of a new 100 MW, coal-fired unit at Osage. In the interim, the company would have to purchase power from other suppliers.⁷

Shortly after this announcement, Pacific Power had a change of heart, and the two companies began negotiating to build the second 330 MW plant at Wyodak. In 1980, they secured permits for the plant and worked on a coal supply agreement. Larry Owen told shareholders in early 1981 that Black Hills Power & Light "expects to have a 20 percent interest" in the new facility and, if negotiations between the two companies went well, construction would start before the end of the year and would be done in late 1986.⁸

As these conversations progressed in 1981, Black Hills Power & Light was reluctant to write off the \$1.3 million they had spent designing and permitting the Osage Plant, particularly if there was a chance that Pacific Power might back out again. To guarantee that the



Back to the Table With Pacific



Wyodak's Rick Stainbrook used his rock climbing skills to inspect the high wall of the coal seam in 1982. The company's coal production increased as it signed delivery contracts with a growing number of external customers.

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Wyodak II project would move forward, General Counsel David Morrill negotiated a coal contract with Pacific Power that would prove to be extraordinarily valuable to Black Hills Power & Light over the long run. Under its terms, Pacific Power promised to take 50 million tons of Wyodak coal as a fuel supply for the new plant. If the plant was not built, Pacific Power agreed to still take 40 million tons, which would necessitate the construction of a train loadout facility to carry the coal elsewhere.⁹ The agreement also included an increased coal price along with a few other changes from the original Wyodak I coal contract. With this agreement in hand, Black Hills Power & Light was willing to write off the cost of developing the proposed Osage Plant.¹⁰

Despite the agreement, Pacific Power delayed design and construction because it faced regulatory challenges in Montana that made it difficult to commit to building a new plant at Wyodak. Montana regulators resisted allowing the cost of Pacific Power's new Colstrip Plant into the rate base. Carrying these costs restricted the company's ability to raise new investment capital. Pacific Power made it clear that it would be a while before it would be ready to commit to the construction of another major, joint plant.¹¹ In February 1982, Larry Owen told Black Hills Power & Light shareholders that the project would be delayed for several more years.¹²

Pacific Power's reluctance presented a challenge to Black Hills Power & Light, since demand for power continued to grow. The company preferred the economies of scale of building a larger plant and sharing the costs with someone, but if that option would not work, Joe Rovere told employees, "we'll either have to find another power source or build it ourselves."¹³

In 1983, the two companies struck a 40-year agreement that seemed to solve problems for both. Pacific Power agreed to provide 75 MW of electric capacity and associated energy to Black Hills Power & Light, anticipating that this power would come from its mine-mouth plants near Colstrip, Montana. The deal increased Black Hills Power & Light's base load generation by 50 percent. Phased in 15-MW increments over five years, the agreement allowed Black Hills Power & Light to meet its anticipated growth in electric demand.¹⁴

The contract also addressed several other issues. It gave Pacific Power the ability to remove the associated capital costs for the Colstrip Plant from the Montana rate base, which pleased regulators and customers.¹⁵ Pacific Power agreed to allow Black Hills Power & Light to move up to 50 MW of power over the western portion of Pacific Power's system, which allowed Black Hills Power & Light to become a wholesale provider to West Coast markets if and when it had surplus power to sell.¹⁶ To take advantage of this opportunity, however, Black Hills had to expand its generating capacity, and that demanded more capital.

Stock Listed on the Big Board

Raising money to finance the construction of the Wyodak Plant in the 1970s had taught Black Hills Power & Light executives a powerful lesson: they would not always be able to ride on the coattails of a bigger partner like Pacific Power. Instead, they needed to

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strengthen the company's position in the nation's capital markets. In the late 1970s, corporate officers began making regular trips to New York, Boston, and Philadelphia to visit with investment managers and analysts, as Rovere put it, "to keep them abreast of what was going on in the company."¹⁷

The company increased its visibility on Wall Street considerably on July 9, 1980 when its shares were listed on the New York Stock Exchange under the symbol BHP. Unfortunately, becoming part of "the big board" did not help the company's share price — in fact, from the fall of 1980 through the end of 1981, the value of the company's shares fell alongside those of many other electric utilities.

Earnings were up, but they were not keeping pace with the returns offered by other investments. Inflation, increasing capital requirements, and regulatory delays kept companies like Black Hills Power & Light from reaching their maximum total return. As a result, throughout 1981, the company's market price was only about 90 percent of its book value.¹⁸ In 1982, however, the company's stock price turned around, rising from about \$22 a share to a peak of \$34 in the fourth quarter. The completion of the Wyodak Plant along with the new cashflows that followed its successful launch helped change the company's financial position.¹⁹

Flush with cash and searching for new investment opportunities that would continue to make the company's stock more attractive to investors, Owen and the board of directors looked for opportunities to diversify Black Hills Power & Light while maintaining strong relationships with long-standing customers.

Customers Cause Concerns

In the early 1980s, Black Hills Power & Light faced the prospect of losing two of its biggest customers — the City of Gillette and the Homestake Mining Company. Gillette's municipal electric system bought wholesale power, and its payments represented about 7.3 percent of Black Hills Power & Light's gross revenue from utility operations.²⁰ So, when the city indicated that it was interested in looking for another provider, Black Hills Power & Light employees sprang into action.

Pacific Power was Black Hills Power & Light's primary competitor for the Gillette contract. Pacific Power told officials that if the city would sell its distribution system to Pacific, the company could deliver lower rates. Black Hills Power & Light, on the other hand, leaned on its history of dependable service to the Gillette community.



Efforts to promote conservation began to translate into a decline in energy use by Black Hills Power & Light residential customers. After 1979 the company had to look for new ways to grow.



Owen, Landguth, and Rovere used both the carrot and the stick while pitching the company's case to Gillette. They reaffirmed Black Hills Power & Light's desire to provide wholesale service and promised to continue letting the city run the retail part of the business. They talked to every civic and service club in the community. But they also made it clear that, if necessary, Black Hills Power & Light would enforce the seven-year termination notice clause in the contract the company had with the city.²¹ Their

Kirk Plant Superintendent Tom Ohlmacher and Assistant Superintendent Tom Stalcup worked to keep the aging facility productive through the 1980s.

strategy paid off. Gillette signed a new, 18-year agreement with Black Hills Power & Light.²²

This close call with Gillette became even more important in the context of another potential calamity: in the early

1980s, the Homestake Mine looked like it might shut down. Since 1941, Homestake had been the company's largest customer. Events that affected the mine also affected Black Hills Power & Light, including the mine's shutdown during World War II, as well as changes in international monetary policy that determined the price of gold. In 1982, labor issues at Homestake gave both entities a scare.

A three-year collective bargaining agreement between Homestake and the United Steelworkers of America expired on May 31, 1982. The following day, a majority of union members voted to strike. Some employees attempted to go to work, but management declared a lockout, and the mine's operations were shut down. Idled by the strike, nearly 1,300 production and maintenance employees, who usually earned a large share of Homestake's monthly \$3 million payroll, looked for other work or public relief. The 118day strike was the second longest in Homestake's history, and it finally ended in a new employment contract for the union on September 26.

With workers out on strike, Homestake reduced its demand for electric power, and for the first time in years, Black Hills Power & Light's sales to industrial customers fell. Fortunately, increases in demand from other customers produced a net gain for the year.²³ The strike also provided some benefits to Black Hills Power & Light. The company hired a number of idle Homestake electricians to deal with much-needed maintenance and repair at the Kirk Plant. "We found that their electricians were very skilled and good people," Ohlmacher remembered.24

Renewing Environmental Concerns

Black Hills Power & Light was caught between the public's sometimes conflicting desires for clean air and low rates. A 1981 sketch in the employee newsletter, the *Lamplighter*, for example, depicted a vacuum cleaner labeled "Clean Air Act" siphoning the cash and coins from the purse, wallet, and piggy bank of a family out for a stroll. The accompanying text cited a Washington University study estimating that in 1979 the Clean Air Act "levied a 'hidden annual sales tax' of \$400 on a family of four in the form of higher utility rates and higher prices on all manufactured goods."²⁵ But management also recognized that public policy concerns for the environment were real and were not going away.

Wyoming, for example, adopted more stringent standards in the early 1980s, requiring power plants to remove additional sulfur dioxide emissions from flue gases. In 1984, Black Hills Power & Light began installing this technology at Wyodak.²⁶ The company also recognized a need to address the impact of its mining operations on the flora and fauna. In 1980, it helped relocate golden eagle nesting areas from trees near the coal mine to specially designed nesting platforms. Eaglets hatched from these nests were used to restore golden eagle populations in Wyoming and other states.²⁷

Black Hills Power & Light's efforts to mitigate environmental issues reflected its desire to address public concerns. These efforts were constantly tempered by customers' desires to hold down costs. But as environmental advocates encouraged consumers to reduce their consumption of energy, Black Hills Power & Light and other electric utilities faced a fundamental shift in their business model.

Changing Patterns of Demand

Historically, electric utility growth had been based on promoting demand for power and increasing investments in power generation. In the early 1980s, however, inflation-driven rate increases, efforts to encourage consumers to conserve electricity, and a struggling national economy contributed to lower-than-expected demand. Black Hills Power & Light's total kilowatt hours sold increased only 2.4 percent in 1980, for example, compared with a forecast of 5.4 percent.²⁸

Facing increasing costs and environmental concerns, many utilities turned to conservation or demand management to avoid spending capital to build new power plants. In 1982, Black Hills Power & Light won permission from South Dakota regulators to begin offering



Wyodak Resource Development Corp environmental staff member Brian Swenson and line crews helped relocate nesting eagles threatened by mining activity in the early 1980s.

new rates took into consideration cost-tracking for interruptible service, off-peak use, load-control devices that limited demand requirements, heat storage, and dual fuel usage.²⁹

Load management programs like these contributed to a slowing demand for electricity across the country, especially when combined with the growing influence of the environmental and anti-nuclear power movements. As a result, many utilities, including Black Hills Power & Light, had fewer opportunities to invest in new power plants. With strong cash flows, these companies began to look outside of their traditional operations to sustain the growth of their businesses and produce increasing returns for shareholders.

In the early 1980s, with healthy cash flows coming in from the Wyodak Mine, Larry Owen pulled together his executive team to look for new investment opportunities. Like most companies hoping to diversify, Black Hills Power & Light sought downstream or upstream business activities that offered vertical integration with the existing business. Management believed it should focus on the geographic region it knew: western South Dakota, eastern Wyoming, and southeastern Montana.

"We saw ourselves as a Black Hills-based company," said Kyle White, who started with the company in these years and worked with rates and regulations. "As a result, we tended to look at what was down the street or deal with business owners we knew from chamber of commerce activities."30

Other opportunities were born of necessity. In the early 1980s, the anticipated closing of the rail line to Lead created both a threat and an opportunity. Coal would have to be delivered to the Kirk Plant by truck.³¹ In 1983, the company's coal mining subsidiary, Wyodak Resources Development Corporation (WRDC), acquired Universal Transport, Incorporated (UTI), a Rapid City-based trucking company with \$6.8 million in operating revenues. Larry Owen told shareholders that hauling coal for Black Hills Power & Light would account for about 24 percent of the trucking division's business. The rest would come from competitive individual meter readers. trucking opportunities such as hauling cement, bentonite, sand, lime, aggregates, and limestone throughout the region. The UTI acquisition also included the company's Mack Truck distributorship in Rapid City, although Black Hills sold this business the following year.³² To complete the conversion from rail to truck, WRDC began construction of a \$3.5 million truck loadout facility.33

RECLAMATION **AT WYODAK**



As coal beds were exhausted, Wyodak began the process of reclaiming the landscape. As early as 1960 the company experimented with reclamation techniques in the South Pit. These efforts continued through the 1970s. Millions of yards of fill material were dumped into the excavated site. Thousands of yards of soil were spread over the top. Planting followed. The company experimented with various grasses to find the hardiest and ensure that the restored landscape would be suitable for grazing by wildlife or cattle.

various load management rates designed to reduce demand during peak periods. These

Diversification Leads to New Name



General Electric I-70S, 1968-2006. As radio communications technologies improved over the years, meters could be read automatically and remotely, reducing companies' dependence on

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As the company continued to diversify, it became clear that its brand name — Black Hills Power & Light — failed to represent the scope of its activities. Accordingly, in 1986, the company rebranded itself as "Black Hills Corporation," although it did not change its legal structure. Under this new moniker, the company continued to grow.

The first acquisition expanded Black Hills Corporation's investment in the trucking industry. In 1986, it acquired Les Calkins Trucking,

Incorporated out of Lodi, California.³⁴ Unfortunately, although revenue increased 34 percent after the acquisition, net income rose only 2 percent because of start-up and integration costs. Black Hills Corporation also explored other market opportunities. Dow Chemical Company, for example, had developed a method for extracting carbon dioxide (CO₂), a valuable compound to oil producers who used it to enhance their tertiary recovery programs, from power-plant stack emissions. Black Hills

products offered Wyodak Resources Development Company a way to vertically integrate its operations and increase overall earnings for shareholders. The company expanded its trucking business in 1986 by purchasing a Lodi, California-based company.

Trucking coal and other bulk

Corporation considered establishing a CO₂ project at the Osage Power Plant, but never moved forward.35

In June 1986, Black Hills Corporation bought the Western Production Company (WPC), a Wyoming-based oil and gas operation, for \$10.4 million in cash. A business with proven fuel reserves amounting to nearly 1 million barrels of oil and 2.3 billion cubic feet of natural gas, WPC also operated oil wells and owned a 44.7 percent interest in a gas-processing plant, all of which were located primarily in the Powder River Basin southwest of Newcastle, Wyoming. With oil prices at their lowest point in many years, Black Hills believed that WPC represented "good potential for improved earnings for future years." 36

Eighteen months later, in January 1988, WPC acquired a pipeline company to expand its investment in the oil and gas industry. Northwest Crude, Incorporated purchased nearly 20,000 barrels of crude oil daily and transported it by pipeline and truck from Wyoming to locations in Montana, North Dakota, South Dakota, Nebraska, and Oklahoma - another endeavor that seemed to complement Black Hills Corporation's growing portfolio.37

Black Hills Corporation had long recognized that its coal reserves at Wyodak represented a critical asset and source of revenue. The company's pioneering efforts to develop aircooled technology had created an opportunity to take advantage of those reserves. By 1983, about a third of the 2.4 million tons of coal mined at Wyodak was delivered to Black Hills Power & Light plants. The remaining two-thirds was sold primarily to PacifiCorp (formerly Pacific Power) for the Wyodak Plant. The company also had contracts in place for coal shipments extending 35 years into the future. Still, Black Hills Power & Light continued to look for more customers as well as ways to add to its existing coal reserves.

When Interstate 90 was built in the early 1970s, it crossed the Wyodak property, and the company lost some of its coal fields to eminent domain. In 1983, Wyodak reclaimed those resources by petitioning the federal government for a coal lease on federal property adjacent to the mine in exchange for the loss of reserves from beneath the interstate. The company also expanded its reserves by successfully bidding for a second federal coal lease on another nearby property.³⁸

With increasing production at Wyodak came new attention to labor relations. Workers at the mine and the power plant were represented by the International Brotherhood of Electrical Workers, but in 1984, mine went to bat for the team. employees went to the National Labor Relations Board to break away from the power plant's bargaining group. They voted instead to affiliate with the United Mine Workers (UMW).³⁹ The UMW spent a vear negotiating but never ratified a contract, and employees later decertified the union. For the moment, at least, the company and its employees had chosen to deal with one another directly.

Climbing the Diversification Curve

Diversification was inherently entrepreneurial and risky. Often, even the most disciplined companies could expect only a single success for every ten initiatives. Like many well-established companies - and especially utilities - Black Hills Corporation wrestled with the underlying philosophy of its diversification program. Could the company transfer successful management skills to unrelated businesses?

At one point, the company faced an opportunity to buy a local company that manufactured Black Hills gold jewelry. At another, the board was asked to consider acquiring a local business college. As investments, both deals made sense. But some members of the



WRDC Key to Success



A group of Wyodak softball players posed inside the bucket of an 18yard Koehring Shovel in 1983. Mine workers, supervisors, and engineers

QUEEN OF THE DATABASES



Irene Klueber joined the company in 1985. No stranger to data management, she had helped Nash-Finch set up its punch-card computer system in the 1960s. When she and her tree-trimming husband, Chuck, moved back to Rapid City in the mid-1980s, she figured she would just retire. One night Chuck mentioned that Black Hills Power was going to put its customer accounts on computers. "I bet you could get a job," he said. Hired to test programs for IBM mainframes, she moved to Engineering to build databases for powerlines and rights-of-way. She brought unmatched on-the-job experience. "I worked for 16 engineers," she said, "and they treated me like a queen." board questioned whether Black Hills Corporation should wander into such unfamiliar territory, and the company rejected both deals.⁴⁰

When Black Hills Corporation did make forays into other businesses, long-time utility company employees struggled to understand the relationship between the culture and rules of the regulated company and those of the new sibling organizations. Management had to explain, for example, that benefits and wages at the trucking division were measured against compensation packages in the trucking industry rather than in the electric power business.⁴¹

There were other concerns. Competitive issues with other trucking companies, for example, spilled into the regulatory arena. Black Hills Corporation's trucking company ruffled some feathers when it tried to expand in the timber industry, for example. Meanwhile, when the oil industry collapsed in Wyoming, petroleum haulers searched for other opportunities, and they pressured regulators to force Black Hills Corporation to take competitive bids for hauling coal rather than simply rely on its own affiliated trucking company. The utilities commissions in Wyoming and South Dakota subsequently opened investigations into the fees that Black Hills Power & Light was paying to its trucking subsidiary and threatened to impose costly transfer-pricing rules.⁴²

Even when moves to diversify made sense, Black Hills Corporation had to climb a steep learning curve. In oil and gas, for example, "we didn't understand reserves and the valuation of reserves," according to Dan Landguth, and the company overpaid. "It was still a good deal and a lesson learned."⁴³ Black Hills Corporation's new subsidiaries were also challenged by the earnings of the core business, Black Hills Power & Light, because they had to produce a higher return than the utility to justify the use of corporate capital for riskier ventures.⁴⁴

Together, these factors drove the conversation as Black Hills Corporation continued to evaluate its diversification efforts in the late 1980s. To be sure, there were some major successes. The company's oil and gas subsidiary, WPC, produced a net income of \$973,000 — a contribution of 4.8 percent to Black Hills Corporation's total — in 1987.⁴⁵ Three years later, WPC profits grew to \$1.24 million, or 5.4 percent of total corporate earnings.⁴⁶

Yet corporate leaders concluded that, overall, many of the company's subsidiaries had either failed to show sufficient growth potential or had increased the regulatory risks of Black Hills Power & Light. Gradually, Black Hills Corporation began to exit various businesses. In 1988, the company sold its trucking division for \$7.5 million, netting a profit of \$500,000. The following year, Northwest Crude's oil transporting operations fetched \$5.4 million.⁴⁷ Overall, the sales resulted in a reduction of the company's workforce from 750 employees to 450.

Two new regulations — a federal tax law and a related decision by the South Dakota Public Utilities Commission (SDPUC) — also had a major impact on Black Hills Corporation's

CHAPTER SIX - RESPONSIBILITY DOWN THE LINE

An unidentified man peers through a solar site selector gauge in 1980.

Renewable energy sources, like

solar and wind, grew increasingly

important as the nation confronted its

dependence on foreign oil and fossil

diversification strategy. Concerned that the benefits of the Federal Tax Reform Act of 1986, a tax cut, should flow to customers as well as to shareholders, the SDPUC, like other regulators across the country, opened an investigation. At its conclusion, the SDPUC and Black Hills Power & Light agreed to a reduction in electric rates "to reflect the Company's savings from the decrease in corporate income taxes" and a rate increase to reflect the full cost of the company's 1983



fuels.

power purchase agreement with Pacific Power.48

Overall, the agreement helped Black Hills Corporation. Yet one element harbored long-range consequences: the SDPUC had capped the amount that WRDC could earn on coal sales to Black Hills Power & Light. This provision incentivized WRDC to seek other customers, especially when the price of coal was relatively high.49

Revisiting Diversification

Diversification vielded limited returns but many lessons. In 1980, the electric utility had accounted for 73 percent of income from continuing operations. Mining provided the other 27 percent. By 1989, after various experiments with diversification, the company had refocused down to three basic business units: Black Hills Power & Light, WRDC, and Western Production. That year, the electric utility accounted for 75 percent of the company's revenue, but only 51 percent of net income came from the utility's continuing operations. Meanwhile, the coal mine, which contributed only 18 percent of revenue, produced 44 percent of Black Hills Corporation's net income. Western Production, with its oil and gas operations, brought in 7 percent of total revenue and 5 percent of net income.⁵⁰ To anyone who studied the situation, Black Hills Corporation's greatest opportunities lay where they had always been, 40 feet under the ground in the coal seam in the Powder River Basin.

Like many of its peers in the industry, Black Hills Corporation learned many lessons in the 1980s. First, utilities faced a problem of scale when trying to diversify, and it was difficult to start businesses that could grow fast enough to make a meaningful impact on the company's bottom line. Acquiring existing businesses brought more financial risk,

EXPANDING THE ENERGY HORIZON

which could be intimidating to long-time utility company managers who were used to more predictable earnings based on regulated rates of return. Black Hills Corporation also realized that even if new entities performed well, they sometimes brought regulatory risks that threatened the company's core business, Black Hills Power & Light. In the future, these lessons would color the company's diversification efforts.

The end of this first round of corporate diversification coincided with a changing of the guard. In 1987, Larry Owen began what he called "a comprehensive succession planning" program" and started grooming and recruiting new leaders, which brought about several key personnel changes in 1989. Dale Clement, the former dean of the business school at the University of South Dakota and a long-time member of the company's board of directors, was hired to replace the retiring George Locke as senior vice president of Finance and

chief financial officer. In October, Landguth, who had served as president and chief operating officer of Black Hills Power & Light for two years, was promoted to president of Black Hills Corporation. Owen recruited Ev Hoyt, the senior vice president for Legal at Northwestern Public Service Company, to replace Landguth at Black Hills Power & Light.51



Owen had planned to retire at age 65, but in

1990, two years short of this milestone, he walked into Landguth's office one day and said, "You know Dan, you're really doing everything. I'm going to go early."

According to Landguth, "Larry was never one that wanted to get in anybody's way." 52 At the end of the calendar year, Owen stepped down and Landguth became chairman, president, and CEO of Black Hills Corporation.53

Meanwhile, the utility industry was beginning to change. Local demand for power continued to increase while, more ominously, the regulatory paradigm that had dominated

Mentoring New Leaders

Preparing for an orderly succession of leadership, CEO Larry Owen announced in October 1989 that twenty-year veteran Dan Landguth would become president of Black Hills **Corporation**

CHAPTER SIX - RESPONSIBILITY DOWN THE LINE

the electric utility industry for decades began to fracture. Late in 1978, President Jimmy Carter signed the Public Utilities Regulatory Policy Act (PURPA), a wide-reaching law that he hoped would encourage energy conservation and promote the development of domestic fuel supplies. A little noticed section of the act provided incentives for cogeneration and small power production operations.

The following year, the Federal Energy Regulatory Commission (FERC) proposed new rules with generous terms for independent power producers (IPPs). Under the new regime, regulators and utility companies were required to buy power from these IPPs and to make just and reasonable payments based on the "avoided costs" of building new power plants. These new rules were challenged in court, but the U.S. Supreme Court upheld FERC's authority in decisions in 1982 and 1983. Over the next several years, the independent power market expanded dramatically, bringing new energy resources and wide-ranging competition to some regions of the country for the first time in decades.⁵⁴ For the new CEO of Black Hills Corporation and its employees, this rapidly changing business and regulatory climate would pose major challenges.


"The future of any company is only as good as its aspirations expressed through strategic plans."

DAN LANDGUTH, CEO, BLACK HILLS CORPORATION

As deregulation threatened to restructure the utility industry in the United States, Black Hills Corporation transitioned to new leadership and a new strategy. The company learned important lessons from its first round of diversification. Evolving to meet the needs of this era meant consolidating and concentrating on core strengths in power generation and customer service. Meanwhile, Black Hills Corporation prepared for a more competitive environment by cutting costs, changing its culture, and embracing incentive-based regulation.

CHAPTER SEVEN

DEREGULATION **CLOUDS THE FUTURE**



mid the towering, Gothic spires of the University of Chicago campus in the late 1950s, a group of econo-L mists began to challenge the broadly accepted idea of the administrative state. A widespread faith in government's ability to manage the economy had developed in the early decades of the 20th century and then flourished under the administration of President Franklin Delano Roosevelt

The stock market finally began to take off in the 1980s after more than a decade in the doldrums. New technologies and deregulation combined to attract new capital to industry.

and subsequent presidents with a proliferation of regulatory agencies. While some academics praised these agencies for bringing order to chaotic marketplaces and protecting the rights of consumers, a new group of scholars came to the fore in the 1950s. They offered a powerful critique of the regulatory state and their conclusions generated strong support from myriad constituencies across the United States. Together, these new perspectives helped usher in a movement centered upon free market and small government ideals that would permeate American politics, society, and business by the 1980s.

These critics asserted that regulatory agencies were too often "captured" by the industries they were supposed to regulate and did not make decisions in the public interest. They asserted that the inefficiencies of the regulatory process slowed the pace of innovation and kept prices artificially high. They questioned the widely accepted idea of "natural monopolies" in capital-intensive network industries like telecommunications, electric power, and air and railroad transportation. Instead, this new cadre of scholars suggested that innovation in the marketplace would inevitably erode monopoly power. These ideas became the pillars of a new way of thinking about the government's role in managing the economy.

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By the 1970s, this new group of academic economists and lawyers had been hammering away at the administrative state for a number of years. Their efforts finally began to change people's thinking in Washington, and lawmakers started considering deregulation in industries ranging from airlines to trucking to telecommunications. Rural states expressed some reservations since regulatory pricing systems had often been used to subsidize service to small towns and rural areas, where service was more expensive. Eliminating these cross-subsidizing pricing structures threatened to make everything from air travel to telephone service much more expensive in rural communities.

By the early 1980s, however, the movement toward deregulation had developed enormous momentum, and it was clear that resistance from rural lawmakers could not stem the tide. In the 1970s, Congress had eliminated the Civil Aeronautics Board and made air travel more competitive; deregulated the trucking and natural gas industries; and ended government-sanctioned price fixing for service fees in the securities industry, which created new opportunities for discount stock brokers like Charles Schwab and Ameritrade.¹ The courts, moreover, broke up AT&T in 1984 and introduced competition into the telephone equipment and long-distance markets. Enamored of the success of deregulation in these other 10.00ċ sectors, public policymakers looked for ways to deregulate the electric utility industry and promote competition.

Five years after President Carter signed the Public Utilities Regulatory Policy Act (PURPA), cogeneration plants and independent power producers (IPPs) began to multiply in some parts of the country. Policymakers initially envisioned that these IPPs would supplement power generated by existing electric utilities. As the independents began to enter the market, however, they deployed smaller, combined-cycle, gas-turbine generating units that relied on the same technologies that powered jet engines. These units allowed smaller plants to produce power at costs that when natural gas prices were low – were competitive with large, conventional steam plants.²

Proponents of deregulation argued that these new technologies made traditional economies of scale obsolete and remained essentially flat. destroyed any argument for continuing the old monopoly system.³ They wanted to give choices to consumers and talked about "retail wheeling" arrangements, under which consumers would be able to buy power from various generators and have it delivered by a separate transmission company to their home or business. They pointed to the European Union, where deregulation had successfully improved service while reducing prices for consumers.



Inflation and the price of electricity; **Black Hills Corporation Annual** Reports, 1985-1993, inflation data from Federal Reserve Bank.

Minneapolis. As inflation climbed, the price of electricity for residential customers

Skeptics of deregulation argued that the unique aspects of the electric business made it less suitable for competition. For one thing, massive amounts of electricity could not be stored, and satisfying demand generally depended on just-in-time production. Even if an IPP could produce power competitively, the transmission infrastructure constituted a natural monopoly. Responding to the argument that Europe provided a good example for the potential benefits of deregulation — or "restructuring," as some called it — skeptics pointed out that Europe's electric utilities were traditionally government owned with a single, integrated transmission system in each country. By contrast, across the broad geography of the continental United States, there were many transmission systems, and not all of them were tied together, so power could not move easily from one market to another.

Utilities expressed some interest in deregulation if it could provide opportunities for easier market adjustments and strategic adaptations. The Edison Electric Institute, the trade association of the shareholder-owned utility industry, for example, suggested a need for regulatory reform in 1981. The association wanted to allow power companies

to include capital spent on construction that was already underway in the rate base and allow shareholder-owned electric utilities to anticipate inflation in rate setting. Utilities argued for faster depreciation cycles to recover capital during high periods of inflation and to permit the use of fuel adjustment clauses so that utilities could pass along the true costs to consumers.⁴ Utility companies also expressed concern about "stranded costs" for power plants and infrastructure that became outmoded but was built to fulfill a company's legal obligation to provide service to customers.

The movement toward electric deregulation picked up speed in the early 1990s. The Energy Policy Act of 1992 restructured the power generation market, exempting independent power producers who were engaged exclusively in the sale of wholesale power from the restrictions of the Public Utility Holding Company Act (PUHCA).⁵ This legislation opened the first chapter of a multi-faceted deregulation story. It would eventually turn the electric utility industry upside down and transform the opportunities open to Black Hills Corporation.

Raised with a Craftsman's Work Ethic

The man charged with leading Black Hills Corporation through the era of deregulation had been raised in a company town. Dan Landguth's father worked for the Homestake Mining Company most of his career, retiring in the late 1950s as the head of the foundry. Along with his two brothers, Dan grew up in Lead, graduating from high school in 1964.

Daniel P. Landguth became chairman, CEO, and president of Black Hills Corporation in 1991. A native of Lead, he had worked for the company since 1969.

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From his parents, he received a strong work ethic, a belief in the value of education, and a craftsman's commitment to workmanship.

Enrolling at the South Dakota School of Mines & Technology, Landguth studied math, science, and engineering. After graduating in 1968, he started work as a management trainee for Pacific Gas & Electric

(PG&E) in Northern California. After a year on the West Coast, he and his wife, Barbara, wanted to move closer to home. "I was going to look for a job in Colorado," Landguth remembered, but on a family trip to South Dakota, he interviewed with Everett Pompy, the head of personnel at Black Hills Power & Light. During the interview, Neil Simpson stopped by and was clearly impressed. Landguth first thought the interview might pay off at

some distant date, so he was surprised when Pompy called shortly thereafter and said: "Neil and I are going to create a position for you."

In California, Landguth had worked with PG&E's large customers to help them forecast power demands, a position that combined his engineering background with elements of customer service and marketing. Black Hills Power & Light did not have an engineer who was focused this way on major customers, and Simpson and Pompy thought Landguth could help.

Landguth began as a power usage engineer but rose quickly through the ranks. Bob Asheim put him in charge of the Ben French station in the 1970s while the company was installing pollution control equipment and building the plant's first combustion turbines. On call 24 hours a day, Landguth learned the daily (and nightly) rhythm of the company's production wing.⁶ Promoted to vice president of Administration in 1980, he worked closely with Larry Owen on operations and strategy. In 1985, he became senior vice president and chief operating officer of Black Hills Power & Light.⁷ Larry Owen sent him to the American Management Association to take courses and to develop a strategic vision. After Landguth became CEO of Black Hills Corporation in 1991, his vision drove the company's development.⁸





The 330 MW generator at the Wyodak plant was designed to produce 2.6 million pounds of steam per hour at 1,000 degrees Fahrenheit.

EXPANDING THE ENERGY HORIZON

Refocusing on Power Generation

As Landguth and the executive team at Black Hills Corporation developed the company's new strategic plan, they focused on the company's ability to continue growing and delivering returns to shareholders. Landguth "thought it was important that we make a complete assessment," so his team scoured the organization's assets and people, seeking out core strengths.9 They found coal and expertise in power generation.

Having managed the utility operation during the company's earlier efforts at diversification, Landguth was particularly sensitive to securing a strong return on investment and wanted to make sure that money not invested in the utility business would be used wisely. He also wanted to avoid the regulatory and transfer-pricing issues that the company had encountered when it went into trucking, so he and his team focused on investment opportunities outside of Black Hills Corporation's existing service territory.¹⁰

Entitled "Focus 2000," the document Landguth and his team put together sought to align the company's assets with power generation. It incorporated seven key strategies: 1) cost containment and increased productivity; 2) increased investment in the electric utility through the construction of a new power plant; 3) increased coal sales to the utility to fuel the new power plant; 4) increased income from oil and gas; 5) above-industry average increases in dividend growth; 6) development of a highly motivated workforce; and 7) dedication to customer service." With these core goals in place, Landguth and his team moved forward.

Buying Back Wyodak

The first step along the path to a renewed emphasis on power generation was to repurchase the Wyodak Plant from the investors who had acquired it in 1978. In 1990, Black Hills Corporation and PacifiCorp struck a deal to do just that. Under its terms, Black Hills Power & Light bought 20 percent of the plant for just over \$42 million.¹²

The purchase price for Wyodak also included the facility's "goodwill" value, or its market value over and above its depreciated cost of construction. The SDPUC had never allowed goodwill into the rate base before, but Black Hills Power & Light believed it had a compelling case. The company argued that customers would benefit from the full value of the purchase because the adjusted cost would still be less than building a new plant or purchasing power. In addition, if the regulators refused to allow the full purchase price into the rate base, shareholders would unfairly lose the earnings potential of this portion of the purchase price.

After deliberating, the SDPUC agreed. On December 17, 1990, the commission declared it was prudent to include the full purchase price in the rate base, perhaps the first time the company had been able to convince regulators that owning power generation benefitted customers.¹³ As part of the regulatory deal, however, the SDPUC declared that Black

Hills Power & Light would not be allowed to file for a rate increase until January 1, 1992.¹⁴ Without the ability to seek rate relief, Black Hills Power & Light assumed a new challenge - to find ways to constantly increase efficiency to keep pace with inflation.

Landguth accelerated consolidation and cost containment. He reduced the size of the executive staff, eliminating two officer positions, cancelled projects, and in February 1991, announced a 5 percent reduction in force. That move eliminated another 15 administrative staff positions in General Services, Information Services, and Human Resources.¹⁵ The following year, he cut another 2.5 percent from the work force.¹⁶ The company also set a goal of reducing operating and maintenance costs to 3 percent below 1990 levels.¹⁷ All of these efforts helped increase efficiency at a time when power demands were rising.

Landguth was convinced that Black Hills Corporation had to sell Wyodak coal to a new power plant in order to increase profits in this difficult time. If the company could manage it, the coal would go to a plant with which it had at least an arm's-length relationship so it could be sold at market prices.¹⁸ Landguth, Tom Ohlmacher, and General Counsel David Morrill visited all of the regional power companies, including Montana-Dakota Utilities (MDU), Idaho Power, Pacific Corporation, Montana Power, and the Public Service Company of Colorado, in search of strategic partners interested in a new, 330 MW plant at Wyodak.19

Many of the potential partners were skeptical, believing construction and fuel costs were too high and regulatory opposition to coal-fired plants too strong. Black Hills Corporation countered this reticence by describing its abundant supply of Wyodak coal and sharing the work of internal engineers, who showed that the project could work. Ohlmacher recalled a meeting with several PacifiCorp executives in Salt Lake City which included Tom Lockhart, who had previously worked for Black Hills Corporation.

"It was a final heart to heart," Ohlmacher said, and "Black Hills Corporation was asking 'Are you going to be part of this or not?"

PacifiCorp was reticent given the costs of construction, the gathering storm of deregulation, \$5 million to nearly \$295 million. and the need for new transmission lines to reach potential customers. Sensing opportunity in Black Hills Corporation's eagerness to move forward, PacifiCorp made a quiet offer to become part owners of the Wyodak Mine. Landguth rejected this overture, saving "Black Hills

Planning Neil Simpson II



The 50th anniversary logo celebrated the incorporation of Black Hills Power & Light Company in 1941. Over the course of a half century, the company's total assets had grown from less than

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is not interested in selling an interest in the mine. The mine forms one of our core businesses, and we want to continue to do business." ²⁰ So PacifiCorp walked away. According to Olmacher, "They said to us, 'If you can build those coal plants for that, you should just start building them.'" ²¹

Soon after the meeting, Black Hills Corporation decided to go forward on its own. In 1991, the company announced plans for an 80 MW, coal-fired power plant at Wyodak. Landguth explained to shareholders that the company needed the generating capacity given the growth of demand in the region. After considering the alternatives, a mine-mouth operation at Wyodak offered the least-cost option, especially given the depressed construction market and low construction costs. The new facility, he said, would incorporate the latest environmental technologies while consuming 400,000 tons of coal annually. Dubbed Neil Simpson II, the new plant would cost \$125 million to build and would be completed on the first day of January 1997.²²

Black Hills Power & Light hoped to ease the financing of the new plant by asking the SDPUC to approve gradual rate increases during construction. With this strategy, interest charges would not have to be added to the rate base during construction and, in the long run, said Ev Hoyt, "our

customers would end up with a cheaper plant." But South Dakota statutes did not allow the SDPUC to base rates on plants under construction. Working with other utilities, the company was able to convince legislators that a change in the law would benefit utility customers by phasing in rate increases prior to the completion of a generating plant. The legislature agreed and revised the law in 1992.²³ That autumn, Black Hills Power & Light filed for a rate increase with the SDPUC, but the plan to build the new plant was soon challenged by an unexpected competitor.²⁴

A Bold Move Quashes a Challenge from Rosebud

Rosebud Energy Corporation, a Montana-based independent power producer, managed a 35 MW plant near Colstrip, Montana. Rosebud informed Black Hills Power & Light that it wanted to build a facility near Edgemont that burned "waste coke," a petroleum by-product that could be used to generate power. Under the terms of PURPA, Rosebud asserted, it could sell electricity to Black Hills Power & Light and eliminate the company's need to build a new plant at Wyodak.²⁵

Black Hills Power & Light was interested in the project, but not if it meant scrapping Neil Simpson II — planning was too far along and was a vital piece of broader strategic plans.



Wyodak Mine Manager Jim Williams overseeing the new coal conveyor system in 1994. Relying on in-pit crushers, the new machinery fed a mile-long conveyor that carried coal to three storage silos near the power plants.



Black Hills Power & Light invited Rosebud into the planning process for Neil Simpson II and allowed it to base its argument for "avoided cost" on that unit.²⁶ Not wanting to wait, Rosebud asked regulators to kill Neil Simpson II.

In framing its decision, the SDPUC wanted to know which of the projects would produce power more efficiently. Black Hills Power & Light argued that Rosebud could not build a more cost-effective plant and pointed out that a second plant at Wyodak would provide critical backup for customers if one went down for any reason.²⁷

Black Hills Corporation understood the gravity of the situation. The company saw the entry of an independent power producer in its market as "a threat to our ability to survive as a company," said White. "If we couldn't grow earnings, we weren't going to be long-lived." ²⁸

Black Hills Corporation engineers, assisted by a team from a Kansas City-based engineering firm called Black & Veatch, pored over the designs.²⁹ They were looking for ways

Helicopters helped finish the construction of a new 230 KV transmission line built between Spearfish and Lead in 1992.

to reduce construction costs, and Landguth grew confident as he reviewed the amended plans. At a meeting with David Morrill, Landguth came up with a bold plan reflective of his commitment to balancing customer and shareholder interests.

"Let's guarantee the price," he declared. "If it costs more than that, we're going to take the inflation risk. We're going to take the construction risk. We're going to take the risk of equipment that may sit on a dock someplace and is not shipped. We're going to take the labor risk. The shareholder," he concluded, "will assume all of these risks and not the customer." 30

Morrill, who had been immersed in the first Wyodak negotiations in the 1970s — when inflation was rampant and the costs of construction skyrocketed — thought Landguth

was crazy, and the board of directors were similarly hesitant. Landguth, however, laid out a case for the opportunities that lay ahead. He had worked in power plants, and he knew his team. "I had a tremendous amount of respect for the people that operated our power plants," Landguth said. He believed "that they could get it up and operating on time and under budget." 31



Ribbon cutting Neil Simpson II, 1995. Dan Landguth and Virginia Simpson

stand at the center of a crowd of well-

wishers at the ribbon cutting for the

new Neil Simpson II power plant.

Confident that they had come up with the least-cost plan for customers, Black Hills Power

& Light made a dramatic announcement in 1992, telling regulators in South Dakota and Wyoming that it could build Neil Simpson II for \$113.6 million (which later grew to \$124.9 million after financing costs) and would deliver electricity at between 4 and 4.5 cents per kilowatt hour. With this announcement, the company assumed all the

risk for any over-budget construction — with a few escapes built in. But it also made clear that all bets were off if Black Hills Power & Light had to buy power from a qualified facility like Rosebud.³²

Black Hills Power & Light had outmaneuvered and underbid Rosebud, and the SDPUC knew it. On May 26, 1993, the commission denied Rosebud's request, concluding that Black Hills Power & Light had acted in good faith when it planned Neil Simpson II. Knowing that the new plant represented a better deal for customers, regulators permitted the plant's construction. The decision also held that the SDPUC had no authority to determine either the timing or need for a utility's requests for additional capacity. As Black

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Hills Power & Light had argued through its actions, that risk belonged to the utility and its shareholders, and the commission would only weigh in when the utility sought to add that additional capacity to the rate base.³³ In other words, the regulators told management: if you want to build it, go ahead, but do so at your own risk.

On a warm August day in 1993, members of the SDPUC joined South Dakota Governor Walter Dale Miller, company executives, and Neil Simpson's widow, Virginia, for a groundbreaking ceremony on the new Neil Simpson II Plant.

To help finance the construction of the plant, Black Hills Corporation issued 525,000 shares through the company's Dividend Reinvestment Program, netting more than \$13.3 million in new equity capital.³⁴ Chief Financial Officer Dale Clement said the company would also issue \$87 million in bonds, a move that would increase the company's debt ratio from 34 percent in December 1993 to as much as 48 percent by 1996.³⁵ The company's board and leaders felt the risk was worth the return.

Over the next few months, the pressure was on as the company sought to honor its commitment to finish construction at \$124.9 million. Landguth tapped Tom Ohlmacher, the company's director of Power Generation, to run the project. Olmacher worked closely with engineering firm Black & Veatch, who managed construction. Meanwhile, the company moved deliberately into new markets to find customers for the surplus power that Neil Simpson II would generate.

In 1994, Black Hills Corporation sought and received approval from the Federal Energy Regulatory Commission (FERC) to create Black Hills Generation, a new subsidiary that would produce and sell wholesale electric power and energy in competitive markets.³⁶ The new business obtained exempt, wholesale-generator status under the terms of the PUHCA.³⁷ Meanwhile, Black Hills Corporation also announced plans to create another new business called Wygen that would operate as a subsidiary of WRDC and build an additional 80 MW plant at Wyodak to produce wholesale power.

From some perspectives, Wygen represented a big risk. Regional markets already had a surplus of power. Skeptics asked whether the company would be able to build a plant and then sell the power at a profit.³⁸ Landguth reassured investors that the company would only move forward with the plant if it could secure sufficient long-term contracts to make the project financially successful.³⁹ He also affirmed that Black Hills Corporation would be mindful of transfer-pricing regulations, telling state policymakers that Wygen would not sell power to its newly-rebranded sister company, Black Hills Power (The company dropped the "& Light" around this time in order to modernize its brand.)⁴⁰

Stock Issued to Finance the Plant

Wholesale Power

When the company landed its first contract — to supply the Sheridan, Wyoming service territory of MDU — everyone celebrated. Scheduled to begin in January 1997, the agreement projected revenues of \$90 million over the ten-year contract period.⁴¹ MDU and Black Hills Power also agreed to build a new combustion turbine to meet peak-demand needs.⁴² The MDU contract, along with the company's agreement with the City of Gillette, gave Black Hills Corporation a solid foothold in the wholesale power business.

The MDU contract also changed the economics of the Neil Simpson II Plant, giving Black Hills Power the opportunity to offer utility customers a better deal. The company withdrew the rate stability plan application it had submitted to the SDPUC. Landguth told shareholders that lower capital costs, coal cost concessions, and cost containment had decreased the project's overall expense.⁴³ Customers also benefitted after the company struck its wholesale agreement with MDU because putting a percentage of Neil Simpson II's production into the competitive market removed some of the cost that would have been added to the rate base. Together, these things lowered the overall amount the company would need to seek in rate increases when the plant went online.

The company submitted its application for a 9.96 percent rate increase in 1994. It was the first increase the company had requested in 12 years, and, as the company noted, was well below the 25.8 percent rise in the consumer price index that had taken place in that same period.⁴⁴ Even so, industrial customers resisted the rate increase until Black Hills Corporation offered an innovative approach to ratemaking.

In the 1970s, Black Hills Power won the right to circumvent formal rate hearings when it needed to pass fuel and purchased-power cost increases to customers.⁴⁵ By the 1990s, these fuel and purchased-power costs were hitting industrial customers, like Homestake Mining, Dacotah Cement, and sawmill operator Pope & Talbot, particularly hard. They had a high load factor and carried disproportionate shares of the capital cost of the company's power-generating infrastructure. These industrial customers also expressed concern that Black Hills Power was creating more generating capacity than it needed with Neil Simpson II – excess capacity that, to their thinking, customers like them should not be expected to fund.⁴⁶ Kyle White, who managed rates at the time, wanted to soften the inevitable resistance to a full rate increase that would come when Neil Simpson II powered up. He suggested that Black Hills Corporation take capacity out of the equation.

White and his colleagues believed that removing the fuel cost adjustments from the rate structure would help to transform the culture of the company and prepare it for deregulation. "We were essentially market takers," White said, and whatever price the company paid for fuel, it could pass on to power customers. Exposing the company's profits to the ups and downs of the markets would make employees more attuned to opportunities. Management also saw opportunities in wholesale power sales. By removing fuel cost adjustments, the company hoped for greater freedom from regulators when it entered the wholesale market.⁴⁷

DEREGULATING **TELECOMMUNICATIONS**



The breakup of the largest corporation in the United States in 1984 a million employees, AT&T represented the best and the worst of public utility monopolies. Accepting competition in the long distance and telephone equipment markets, AT&T agreed to let its "Baby Bell" local telephone companies go their own way. It also gave them a newly developed product of a parting gift—the cell phone.

Competition flourished in the markets for long distance, telephone equipment, information services, and cellular technology over the next 12 years. When Congress passed and President Bill Clinton signed the Telecommunications Act of 1996, the new law sparked competition for local service as well.

With the takeoff of the internet at the same time, a host of new companies across the county laid fiber optic lines to compete with existing local telephone and cable television companies. Between 1996 and 2000, capital spending by telecommunication companies rose 148 percent. At the same time, share values rose even more quickly, especially for the new competitive local exchange carriers. Among the new competitors were a handful of electric utilities.

Company Offers to Freeze Rates

EXPANDING THE ENERGY HORIZON



Now that Neil Simpson II could produce power more cheaply than older stations like the Kirk Plant in Lead, Black Hills Corporation ended a chapter in its history by closing the Kirk Plant in September 1995 and



The closure underscored many of the technological issues facing the industry in the 1990s. As Lux pointed out, "the old stokers [at Kirk] were very reliable. Not long before the closing, we set a record of availability of 13-and-a-half months on Unit 4. That was a pretty solid record and still stands today." An outstanding maintenance crew, "some of the best I've seen in my 20-plus years' experience in the industry," Lux continued, also kept the old machinery running well.⁵²

Still, the Kirk Plant was not efficient. Located nearly 100 miles from the Wyodak Mine, trucking expenses added substantially to the cost of generating power. Wyodak had newer, pulverized coal-burning technology that could produce more power per ton of coal, and Black Hills Corporation had set a target to reduce costs to \$30 per megawatt hour at all of its plants. Knowing that the Kirk Plant could not hit that target, Landguth told employees that the closure would save the company nearly \$1.2 million in 1996 operating expenses. It was time to move on.53

Work Culture Changes

Employees who transferred from the Kirk Plant to Gillette experienced a dramatic change in the work culture. Homestake had sold Kirk to Black Hills Power & Light in 1954, and the mine's corporate culture had left a lasting imprint on daily life at the plant. Lead was a company town dominated by the relationships between Homestake, the union, and the community. "The Kirk Power Plant, in those days," Lux said, "was a very strong union environment."54

Gillette and Wyodak were totally different. After the failure of the International Brotherhood of Electrical Workers (IBEW) and the United Mine Workers (UMW) to organize the workers at the Wyodak Mine and the power plants, only two unionized



The commission's ruling in Black Hills Power's rate case reflected a compromise. The company was allowed to implement a 6.76 percent overall increase as long as it would freeze electric rates until the year 2000.⁴⁸ The company also agreed to eliminate its fuel cost and purchased-power adjustment clauses, meaning shareholders would assume these risks rather than customers. In exchange, Black Hills Corporation shareholders would get to keep 100 percent

At the Osage Plant, Mick Dowdy was part of the crew that maintained the stokers. The old stokers at the Osage and Kirk plants were very reliable, but they could not compete with the efficiency of newer pulverized coal technology at Neil Simpson II.

of the profits from the sale of excess energy to off-system customers — an unusual circumstance for utilities.⁴⁹ This new structure provided capital investment incentives to shareholders while allowing management greater flexibility to reward employees for sales efforts and continuous process improvements.

Employees Push to Complete One Plant and Retire Another

Many employees toiled seven days a week in the intense months leading up to the completion of Neil Simpson II in 1995. The first coal-fired plant built in the United States in years, the plant had to pass a series of new and untested environmental compliance checks. Mark Lux and Tom Stalcup sat at the controls, manually operating the plant through a successful examination.

To everyone's great relief, Neil Simpson II came in under budget and ahead of schedule, saving the company millions of dollars. "It was a long struggle," said Lux. "You get to



Women increasingly filled nontraditional jobs at Wyodak and Black Hills Power in the 1990s.

employees worked at the entire Neil Simpson complex in the mid-1990s. For this reason, little tension existed around traditional labor issues like wages or working conditions. Instead, workers' concerns at Neil Simpson revolved around communications and coordination.

As Black Hills Corporation executives listened to employees and understood their needs and frustrations, they decided to create five new positions for operations and maintenance supervisors, a step they hoped would improve the flow of information and ideas. "We started dealing with the issues," said Jim Mattern, who served as director of Human Resources in the early 1990s. "We said 'there's going to be continuity, communications, and consistency." ⁵⁵ As a result of this reorganization, most of the employees at Neil Simpson II chose not to be represented by a union, although the IBEW continued to negotiate contracts.

Technology also shaped the worker experience at Neil Simpson II. Kirk legacy employees "were used to running stoker-fired units," said Lux. "At Neil Simpson II, 98 percent of the controls were electronic. Operators who were used to turning pistol grips on a boiler turbine generator panel," he continued, "were now playing with a keyboard and starting everything up with a mouse." ⁵⁶

Like employees across the company, those who transitioned from Kirk to Neil Simpson II had to adjust to larger workplace issues. Landguth had raised these issues with the broader workforce. The economy was changing, companies needed to become more nimble, and employees could no longer expect to stay in one job or with one company all their lives. If they wanted security, he said, employees needed to "constantly expand themselves by making sure they [were] properly trained on new technology."⁵⁷

Landguth's message was not always welcomed by employees, who had spent most of their careers at Black Hills. "I was very loyal," said Don Dubej, who had worked his way up to management as a line services manager in the late 1980s. "But I wondered, 'Has he lost interest in me and others? Are they not really concerned about our well-being and welfare beyond six or seven years?"⁵⁸

Landguth understood why long-time employees like Dubej were uneasy and decided to take the time to visit with employees at the job site. "We'd be at a power plant, and might be there from six in the morning until midnight to get all the crews," Mattern said. "He was adamant that 'we meet on their schedule, not on our schedule."⁵⁹

During these meetings, Landguth and company employees confronted a bald fact: the days of rate-of-return regulation were coming to an end. In the old culture, customer service was paramount because customers could complain to the local utilities commissions, directly affecting the company's working relationship with regulators. With rates frozen and income growth dependent on increasing efficiencies under the new regulatory regime, unhappy customers resulted in rework and higher costs. Moreover, Black

LAUNCHING DAKSOFT



To diversify in the 1990s, Black Hills Corporation looked for strengths and market advantages within its own organization. By 1995, the company's Information Services group had developed expertise in data processing, hardware, software, media, and communications. Under Don Lewis, this group was organized as a separate business unit — DAKSOFT.

Serving both internal and external customers, DAKSOFT developed software for external clients, beginning with the sale of its in-house developed customer information system, which was sold to other utilities including MDU in Bismarck. The State of South Dakota's Game, Fish, and Parks Division, for example, commissioned DAKSOFT to develop a reservations management system for its campgrounds. The system was so successful that DAKSOFT began offering similar services to other states.

Hills Corporation had to recognize that, if a competitive market came to its service area, unhappy customers might simply go elsewhere.

Meanwhile, the company's performance increasingly depended on employees' commitment to increasing shareholder value. As regulators adopted rules that provided financial incentives for improved productivity and service, union leaders and management changed the focus of their discussions. Throughout the 1990s, negotiations produced a series of agreements that rewarded employee groups if they achieved productivity goals. "We were able to say this is a win-win situation," Hoyt said, adding that if the company could find ways to bring efficiencies to the bottom line, it would also be able to increase compensation for front-line employees.⁶⁰

Fear complicated the transition to this new paradigm for many employees. Abandoning long-standing comforts and workplace traditions to pursue riskier strategies and assume greater responsibilities worried employees. Landguth, Hoyt, and other corporate leaders empathized with employees. They, too, were casting anxious looks toward the horizon.

Everett Hoyt became president and chief operating officer of Black Hills Power in 1989. With degrees in Mechanical Engineering and Law and 16 years' experience at Northwestern Public Service, he understood the challenges facing the company as deregulation loomed on the horizon

State regulators resisted the growing momentum of deregulation in the electric industry in the United States and abroad. Black Hills Corporation took some comfort in the state's resistance. At the end of 1994, Landguth reassured shareholders that South Dakota and Wyoming continued to give electric providers exclusive rights to franchised service territories while recognizing that the company had always faced competition from alternative fuels, self-generation, and public power.

Landguth also told shareholders that the company was well-positioned if and when the energy industry was deregulated. Wyodak coal and the company's mine-mouth generation plants provided considerable competitive advantage in the power-generation market.⁶¹ Coal could be mined and transferred by conveyor to Neil Simpson II, for example, for 50 cents per I million British Thermal Units (MMBTU), compared to natural gas prices that ranged from \$1 to \$12 per MMBTU.⁶² Moreover, if nationwide competition came, Black Hills Power sat poised at the junction of the Eastern Interconnection and the Western Interconnection — the two major power grids serving the continental United States.

Some employees and shareholders were not comforted by Landguth's reassurances. "It caused a lot of stress on people," Mattern said. Everyone was talking about deregulation, and there was a concern, he said, that "if we weren't doing it, what [was] wrong?" 63

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Stresses created by the looming shadow of deregulation, however, had their benefits, and Landguth and his executive team recognized that the company's employees would have to learn to behave as if they were in a competitive market, even if deregulation never reached their service territory. "We were going to become even more customer-focused," Kyle White said, "and we were going to look for efficiencies and profit opportunities within the existing company. We no longer had the ability to go to our regulators and ask them to bail us out." 64

While a number of other states radically restructured the electric utility industry, South Dakota and Wyoming focused instead on performance-based management and market-based ratemaking. These initiatives reinforced the idea that better performance could produce better results for shareholders and customers.⁶⁵

Meanwhile, the number of independent power producers increased across the United States. Several states, including California and Montana, were deeply immersed in redesigning electric service regulations and, subsequently, the market. But in most parts of the country, wide-open competition remained more theoretical than real.

Black Hills Corporation had begun to prepare for this brave new world by investing in power-generating facilities. The company wanted to continue to provide reliable and relatively inexpensive power to its long-time customers in South Dakota and Wyoming. The number of customers in the company's traditional service area continued to grow, increasing by 7 percent between 1989 and 1994. Revenues from electric energy sales were up even more — 16 percent in the same period. While coal-mining revenues fluctuated depending on fuel demands, Wyodak continued to play an important part in the company's success, contributing nearly 41 percent of the company's total operating income.⁶⁶

At the same time, the company was also building power-generating capacity, so it could satisfy demand from its own customers and enter the wholesale power market. By encouraging and cooperating with regulators to develop new rules, it had created incentives for employees and shareholders to take risks for the potential of greater returns. In the next chapter of deregulation, transformations in state energy markets, particularly California, would shake the industry across the United States.



"To break up a network that has been reliable and cost effective, only to find out later that there really is such a thing as a natural monopoly - would be a disservice to the people of South Dakota."

JIM BURG, CHAIRMAN, SOUTH DAKOTA PUBLIC UTILITIES COMMISSION "NEW ECONOMY"

Wall Street celebrated the "new economy" created by the internet in the late 1990s. As mouse clicks moved products and money around the world, traders at computer screens placed bets on power and energy. Champions of deregulation pushed Black Hills Corporation to embrace the new paradigm. With lessons learned from earlier efforts to diversify, Black Hills Corporation avoided the rush to embrace new business models. Instead, the company evolved gradually in turbulent times, seizing opportunities created by a marketplace hungry for energy.

CHAPTER EIGHT

DEREGULATION AND THE

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he future is here — and the future is competition," Elizabeth Moler told reporters on April 24, 1996. As chairperson of the Federal Energy Regulatory Commission (FERC), Moler revealed that the commission intended to require electric utilities to allow competitors to transmit electricity at cost over their lines.¹

This was not welcome news to utilities. From their point of view, the announcement was analogous to a builder who bought a truck only to have the government require him to loan his truck to a competitor whenever they asked. The builder, moreover, could only charge the price of the gas and depreciation. The builder could not charge for profits lost or expect compensation for the loss of the use of the truck. Proponents of deregulated power, however, saw a different analogy: for years, they argued, the government had only authorized one builder to own a truck. This special privilege gave the builder unfair control of the market.

The FERC said it wanted to promote competition in the wholesale market and "bring more efficient, lower-cost power to the nation's electricity consumers."² Its new rules did not deregulate the power industry, the commission argued. They simply restructured it for interstate transmission. State public utilities commissions did not have to adopt the same philosophy.

As policymakers embraced deregulation, utility executives faced critical decisions that were defined by new rules adopted by policymakers. In California, incumbent utilities like Pacific Gas & Electric were forced to sell a significant portion of their power-generating assets and create fully separated subsidiaries to handle generation, transmission, and local distribution.³ Meanwhile, Montana Power Company eagerly sold its plants and power purchase contracts to redeploy its capital into telecommunications, rebranding itself as Touch America. Utilicorp United of Kansas City (the predecessor of Aquila, Incorporated) dove into unregulated businesses all over the world, including in Australia and New Zealand, adopting a high-risk business strategy financed largely with debt. Enron — the Houston, Texas-based poster child of deregulation — promised to revolutionize the electric industry.

Enron Reshapes the Marketplace

Founded in 1985 out of the merger of two natural-gas pipeline companies, Enron had fashioned itself as an aggressive buyer and seller of natural gas by the early 1990s. According to author Roger Lowenstein, the company embraced a financial strategy that "any commodity could be reduced to a financial quotient, to a sub-particle of tradable risk."4 In 1992, Enron benefitted enormously when the Commodity Futures Trading Commission exempted energy derivatives and related swaps from government oversight. It soon became "the largest natural gas company in the largest natural gas market in the world."5

Enron poured millions of dollars into lobbying efforts at home and abroad, pushing for deregulation and privatization of energy markets. It bought fuel and power-generating

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assets on every continent, and then set out to exploit new market opportunities.⁶ By the mid-1990s, with the globalization of finance and the rise of international trading in all sorts of commodities and securities, Enron had accumulated significant assets and could even influence prices in some markets.7

Flush with success. Enron believed it could transform the market for electricity as it had with natural gas. CEO Jeffrey Skilling toured the country, asserting that consumers paid three to eight times the cost of wholesale electricity. Deregulation, he said, would save them \$60 to \$80 billion a year.8

Seeking entrée into the electric industry, Enron bought Portland General Electric, a major utility in Oregon, in 1996.9 The next year, Enron announced that it intended to become the world's leading energy company. It planned to move aggressively into electricity by supplying power to consumers and companies and trading energy commodities in the growing wholesale marketplace. Business Week proclaimed that Enron had evolved "from a stodgy pipeline company into a corporate colossus."¹⁰

Many people in the electric industry disagreed with Skilling, arguing that the electric power business was not like the natural gas industry. Transmission could be interrupted by thunderstorms or complications on the grid, and states — not the more centralized federal government - regulated the industry. Finally, it was harder to make money buying and selling electricity when a company did not actually own power plants.¹¹

In Washington for hearings on energy-policy issues, Ev Hoyt listened to Jeffrey Skilling testify before Congress. Ouizzed about Enron's energy marketing strategies, Skilling seemed to patronize the legislators. Hoyt was astounded. "Where is the benefit to customers?" he thought as he considered Skilling's proposals.¹² Still, everyone seemed to be enthralled by Skilling's vision. During industry meetings, Dan Landguth and Ev Hoyt were sometimes accosted by industry peers who urged Black Hills Corporation to "get on the train" and help lobby the South Dakota legislature for deregulation. Landguth and Hoyt refused.¹³

South Dakota, Montana, and Wyoming responded differently to the FERC order and the movement toward deregulation. Montana lifted many of its rules in 1997.¹⁴ Wyoming and South Dakota commissioners also considered policy changes to encourage competition. PacifiCorp, Utah Power, and other companies pressed the Wyoming Public Service Commission to embrace deregulation. "Along with the rural electric cooperatives in Wyoming," Landguth said, "we were the only voice in opposition."



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As Enron became one of the biggest success stories of the 1990s, its executives touted their business model as the cutting edge of energy trading.

Wyoming and South Dakota Consider Deregulation

A SURGE IN NATURAL GAS-FIRED PLANTS



New construction of gas-fired power plants surged in the late 1990s, driven by several factors. Gas was relatively cheap and abundant. Gas-fired plants met with less public resistance, as compared to nuclear or coal-fired plants, and could be built more quickly. Black Hills Corporation increased its holdings of gas-fired plants by acquisition and new construction. The company purchased a 273 MW co-generation plant northeast of Las Vegas, Nevada, from Enron. The plant included an existing 51 MW plant and a 222 MW combined-cycle expansion that was under construction. Black Hills Corporation completed the construction and brought the plant on line in January 2003.

In the mid-1990s, Black Hills Corporation hired a consulting firm called Texas Perspectives, Incorporated to help it understand how deregulation — or "restructuring," as it was euphemistically called — would affect Wyoming and South Dakota. Issued in December 1997, the report asserted that customers in those states enjoyed some of the lowest electric rates in the country, but that the national tide of deregulation would likely raise prices in Wyoming and South Dakota while lowering them in the Northeast and California.

Fortunately for Black Hills Power, officials in Wyoming and South Dakota were in no hurry to follow the crowd. South Dakota Public Utilities Commission (SDPUC) Chairman Jim Burg told the *Rapid City Journal*, "I personally don't see any advantage to restructuring in South Dakota at this time." He believed that dissolving "a network that has been reliable and cost effective, only to find out later that there really is such a thing as a natural monopoly, would be a disservice to the people of South Dakota."¹⁵ Nevertheless, the SDPUC kept its eyes on California, Montana, and other states to see how deregulation would play out.

Against the backdrop of deregulation, Black Hills Corporation had to re-evaluate its strategy. The success of Neil Simpson II seemed to illuminate a bright future, as earnings from the plant could be invested in new businesses or returned to shareholders through increased dividends. Management evaluated these opportunities even as it measured looming threats.

The company had neither the size nor the scale of operations to survive in a hotly competitive national or regional market.¹⁶ It either had to grow or risk being acquired — large companies were snapping up small electric utilities across the country just as they had in the 1920s. "We had to find some other growth opportunities," said Landguth. "That was the only way to stave off potential buyers" and, the company believed, to protect customers in South Dakota and Wyoming.¹⁷

Following its experiments with diversification the decade before, Black Hills Corporation had rejected acquisitions in industries outside of its core capabilities. Instead, the company evolved by focusing on its traditional strengths – power generation and fuel development.¹⁸ In 1996, the company developed a mission statement that emphasized its desire to become national in scope and competitive in pricing.¹⁹

A Three-Part Strategy Evolves



Net income increased by more than 400 percent between 1980 and 1996. Diversification and more efficient operations contributed to the bottom line. (Compiled from Black Hills Corporation annual reports, 1980-1996.)

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The updated Focus 2000 strategic plan set a goal of 5 percent growth per year. That goal depended on building new facilities capable of producing a combined 1,000 MW of electrical power. In other words, Black Hills Corporation set its course in the exact opposite direction of Enron and others. While Enron advised companies to "decapitalize" and focus on transactions, Landguth wanted to invest capital in fixed assets that would provide a stable



power source for customers and long-term earnings for shareholders.20

Shortly after FERC opened transmission lines in 1996, Black Hills Corporation announced a major restructuring. According to Landguth, the company's new strategy sought

"to position the Company nationally" and "to offer competitive prices" in a variety of markets. Black Hills Power reorganized into four functional units: Power Resources, headed by Tom Ohlmacher, focused on power generation; Retail Electric (regulated), led by Ev Hoyt, took care of transmission and distribution; Energy Services, led by Hoyt and Jim Mattern together, put its emphasis on customer service; and a fourth group, Corporate Support, was responsible for general administration.²¹ This move allowed the company to track costs as it would in a deregulated environment, so if deregulation came, Hoyt said, "we were prepared to break Black Hills Power into those functional units." ²²

Black Hills Corporation began to understand that, in some ways, it had created an opportunity to thrive in two worlds. It continued to operate in a relatively traditional, regulated market at home, and as Hoyt put it, "we felt we were protecting our customers." "But if California or Oregon wanted to deregulate, fine," he added. "We would be a power supplier to those regions."²³ And, as always, coal remained Black Hills Corporation's greatest asset in an expanding power market.

Wyodak Grows

Recognizing Wyodak as its golden goose, Black Hills Corporation was constantly looking for ways to increase efficiency and effectiveness at the mine. On September 12, 1995, the mine closed its South Pit, turning the page on a 36-year history that had produced 55.5 million tons of coal.²⁴ The company then began restoration work at the site, turned to more profitable coal seams, and upgraded its facilities.

A loader fills an end dump truck in the pit of the Wyodak Mine in the 1990s. In-pit equipment continued to arow in size and capacity as mining technology progressed.

EXPANDING THE ENERGY HORIZON

In the fall of 1996, Black Hills Corporation agreed to acquire a portion of the Clovis Point Mine adjacent to Wyodak from Kerr-McGee Coal Corporation.²⁵ Under the terms of the contract, Wyodak Resources Development Corporation (WRDC) assumed Kerr-McGee's responsibility to reclaim an existing Clovis Point pit in exchange for the mine, an office building, a train loadout, and a shop. "That was great for us," mine manager Jim Williams said, "because we needed a place to dump overburden we were mining elsewhere."²⁶ The deal nearly doubled Wyodak's federal- and state-leased coal reserves from approximately 173 to 330 million tons.²⁷

As coal demand continued to rise across the United States, Black Hills Corporation looked for ways to sell to eastern U.S. markets. Black Hills Capital Group formed a new subsidiary called Black Hills Coal Network in September 1998. Shortly thereafter, this new entity acquired the assets of an Ohio-based company called Coal Network.²⁸ Coal Network had been selling coal from the Powder River Basin to midwestern markets, and Black Hills Corporation hoped it could do the same with Wyodak coal.

By the late 1980s, Black Hills Corporation's oil and gas exploration and development subsidiary, Western Production Company (WPC), had made several important investments in oil and gas properties. With the exception of the Finn-Shurley Field in Wyoming, however, it lacked significant operations of its own. In the early 1990s, Landguth looked for someone who could turn Western Production into a producer. In 1993, he chose a general manager with deep roots in the company.

David "Dave" Emery represented both the heritage and future of Black Hills Corporation. An enrolled member of the Chevenne River Sioux Tribe, Emery's grandfather and father had worked for Black Hills Power & Light. As a child, he liked to come into the headquarters building on Sixth Street because he "knew which of the ladies had candy on their desks."²⁹ When his father, Jim, was the district manager in Custer, Emery sometimes answered the front door when customers came to their home because their service had been shut off for non-payment. As a boy, he and his father checked the lines in snowshoes during winter blizzards and searched for outages following summertime lightning storms.

After graduating from the University of Wyoming with a degree in petroleum engineering, Emery worked in the oil fields of Wyoming and in the Gulf of Mexico in the mid-1980s, when the industry was in recession and many people had been laid off. From time to time, he had asked his father and others about openings in the

Oil and Gas Expands



Jim Emery, a long-time manager at Black Hills Power & Light, served in both the South Dakota House of Representatives and State Senate. Jim's father was also a company employee. Jim's son, Dave, grew up walking power lines and talking to customers at the front door.

\$15.00m

oil and gas division of Black Hills Corporation, but nothing seemed to fit.

Home in Custer for his wedding in June 1989, Emery got a call just as he was about to go to the rehearsal. "I interviewed the first morning of my honeymoon," he said.

He continued to talk with various managers at Black Hills Corporation over the telephone over the next several days as he and his wife, Deanna, traveled from Custer to Glacier National Park and back. On the last day of his honeymoon, he interviewed again, this time with Jim Mattern, at a cafe in Custer. Just as he was preparing to go back to work in Fort Worth, Texas, Black Hills Corporation offered him a job with WPC.³⁰

"It was a very small company," Emery said. "We took small working interests in lots of wells rather than a bigger ownership stake." In Wyoming, WPC operated most of the wells in which it had an interest, but the company was not integral to the overall strategy of Black Hills Corporation.

With Emery heading the oil and gas operation of WPC, Black Hills Corporation adjusted that business's strategy. For a number of years, WPC had attempted to grow with internally generated capital. By the early 1990s, years of slow growth showed that this approach was inadequate to the task of shoring up the bottom line. Black Hills Corporation had two options: spend more capital to increase the scale and scope of the business more quickly, or look for a way to tie the oil and gas operations more closely to power generation.

As the market for gas-fired power plants exploded in the mid-1990s, Black Hills Corporation began to invest more in natural gas exploration and production and expanded the development of gas-fired power plants. This plan mirrored the strategy of owning a coal mine and power plants at Wyodak. With natural gas, however, the company could sell its produced gas into the Northern Rockies Pipeline System and then buy gas for its power plants out of the same system for a comparable price. According to Emery, "it gave us the opportunity to mitigate the risk of gas price fluctuations."³¹

The company had agreed to bear the risk of fuel price fluctuations in its rate freeze agreement with the SDPUC, so this hedging strategy was important to the company's overall profitability. With a strong base in natural gas development, Black Hills Corporation would also develop a better knowledge of the market "to get the best price for our production and also the cheapest price for our usage," said Mark Thies, who joined the company in 1997 as controller.³²



Although revenues from oil and gas doubled between 1987 and 1994, net income from these operations remained essentially flat. (Compiled from Black Hills Corporation annual reports, 1987–1994.)



Through the late 1990s, WPC continued to expand across western North America. The company and its partners drilled wells in the Gulf of Mexico, a project that provided short-term profits but did not fit with Black Hills Corporation's longer-term strategies. Meanwhile, WPC focused on long-term investments that could generate stable income streams from ongoing operations.

Oil and natural gas exploration and development were inherently risky, as prices for each could be volatile. When oil prices hit historic lows in 1998, Black Hills Corporation took an \$8.8 million non-cash charge against earnings to write down the value of its oil and natural gas properties.³³ The company grew profitable as oil and natural gas prices began to rebound. In 1999, Western Production became Black Hills Exploration & Production (BHEP) to better link the subsidiary to its parent.³⁴

By the spring of 2000, BHEP had some 270 productive gas and oil wells in Wyoming. Under Emery's leadership, the company reduced operating costs from \$7.12 per barrel in 1991 to \$3.66 in 1999, while total annual production rose 170 percent from 287,000 barrels of oil (or equivalent) to 777,000 barrels during the same period.³⁵

Drilling in the Gulf of Mexico in 1999, Black Hills Exploration & Production and partner Spinnaker Exploration discovered significant sources of natural gas.

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Market Intelligence Gives Direction

With deregulation, electric utilities, like phone companies in the 1980s, perceived an opportunity to sell other products to existing customers, including conservation and energy use monitoring, home alarm systems, communications, cable television, natural gas and other utility-like services. Kansas City-based Utilicorp had been the first to launch these kinds of services, creating a subsidiary called EnergyOne in 1995. Enron and others followed suit. As this business model developed and proliferated, three former executives from KN Energy, a major national pipeline and energy storage company, approached Black Hills Corporation about a partnership.³⁶

The conversation between Phil Schaefer, Allen Dennis, Shawn McLaughlin of KN Energy, and Dan Landguth led to the creation of Enserco Energy in 1996. Schaefer and Dennis would focus on the opportunities to develop bundled services. In the meantime, McLaughlin, who had experience as an energy trader, would lead Black Hills Corporation's efforts to grow its natural gas marketing business. With that industry already deregulated — and electricity appearing to be on a similar trajectory — Enserco promised to position Black Hills Corporation for changes that were likely to take place at both the retail and wholesale levels.³⁷

As it entered the energy trading business, however, Black Hills Corporation embraced a cultural challenge. Commodity traders were risk takers, conditioned to scramble minute-to-minute in search of price advantages that would allow them to buy or sell at a profit. Accustomed to long-term thinking and the slow changes of the utilities industry, Black Hills Corporation had to adjust to develop this agility while maintaining its commitment to financial prudence and strong service. These, after all, had been shaping the organization since 1883.

To develop Black Hills Corporation's energy marketing endeavors, Kyle White worked with the Enserco team in Colorado. Together, they developed a business plan for a bundled services program called Hometown Connections, which the American Public Power Association could offer to its member utilities. Integration took time, but White's



On the trading floor, Enserco employees monitored hour-by-hour changes in natural gas prices. Their knowledge of the markets helped them get the best prices for their customers including independent producers and end-users.

work in Colorado helped bind Enserco and Black Hills Corporation while providing the latter with better insight into the market potential for the bundled services concept.³⁸

As Enserco grew, it developed two core, commercial divisions. The first focused on wholesale natural gas marketing and trading. Enserco employees bought, sold, transported, and stored natural gas throughout the western and middle regions of the United States and Canada. The second division provided services to smaller producers who did not have their own in-house marketing team.³⁹

By the middle of 1998, weaknesses in the bundled services concept became apparent. After investing \$20 million, Utilicorp had revamped its strategy and relaunched EnergyOne with Pennsylvania's largest utility, PECO Energy. As these developments played out, Black Hills Corporation could see that bundled services would take a long time to develop and offered generally low returns, so the company decided to pull out.

Energy trading, on the other hand, had promise. In 1997, Enserco's first full year of operation, the company marketed almost 20 billion cubic feet of natural gas. The next year, Black Hills Corporation bought out its partners, making Enserco a wholly-owned subsidiary. After that, the business focused exclusively on energy trading.

Expanding operations through Enserco provided Black Hills Corporation with a better understanding of other markets and regulatory environments and put the company in touch with potential partners. With a hand in the energy marketing business, the company was also in a position to capitalize on shifts in energy prices.

Energy marketing quickly proved a boon to Black Hills Corporation's revenues, even though it had a limited effect on the company's overall bottom line. By 1998, energy marketing cash accounted for 74 percent of total revenues, although the business showed a small loss equal to 1 percent of Black Hills Corporation's total income. But energy marketing was a long-term play. Black Hills Corporation hoped it would position the company for the future.

As Black Hills Corporation reached into other sectors of the energy industry, the company also acquired a Houston-based, natural gas and crude oil firm called Wickford Energy Marketing in July 1997, renaming it Black Hills Energy Resources.⁴⁰ Two years later, however, Black Hills Corporation decided to divest its non-strategic energy marketing operations. Gary Fish, president and chief operating officer of Black Hills Corporation's non-regulated energy group, explained that Black Hills Energy Resources would concentrate on marketing crude oil and acquiring related transportation assets, leaving gas marketing to Enserco. Black Hills Corporation therefore sold two entities it had acquired

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Gary Fish became president and chief operating officer of the company's non-regulated energy group in September 1999. With 11 years' experience at Black Hills Corporation, he brought expertise in accounting and business development as well as an entrepreneurial spirit.

CHAPTER EIGHT - DEREGULATION AND THE "NEW ECONOMY"

as part of the Wickford deal: a Pennsylvania-based, natural-gas marketing group and a Denverbased, retail-gas marketing operation. After divesting both of these entities, Black Hills Corporation realized a gain of over \$1.8 million.⁴¹

The acquisition and development of pipelines became a critical piece of this strategy. Under the leadership of Scott Bormaster, who had run Wickford's crude oil marketing operations, Black Hills Energy Resources managed the company's Black Hills Millennium Pipeline. By the spring of 2000, Energy Resources had entered into a joint venture with Equilon Pipeline Company to ship approximately 65,000 barrels per day of foreign



Members of Black Hills Corporation's

dedication of the Avenue of the Flags

at Mount Rushmore National Memorial

in 1998. The company gave generously

to enhance the "Shrine of Democracy."

leadership team posed at the

crude oil from the Gulf Coast to connecting pipelines in Longview, Texas.⁴²

Together, Enserco and Black Hills Energy Resources comprised a critical part of Black Hills Corporation's overall strategy. They were constantly on the lookout for national and international markets and partners. One such market presented itself right at home.

Customers Seen as Vital Assets

Black Hills Corporation sought to bolster its relationship with existing electric customers as the threat of competition loomed. In August 1994, Black Hills Power commissioned an independent customer satisfaction survey to help assess any weaknesses that might allow a potential competitor to siphon customers. The results were reassuring: 98 percent of respondents said they were happy with the price of electricity, the reliability of Black Hills Power's service, and the company's fairness in dealing with problems.⁴³ Better yet, the results suggested strategic opportunities: good customer relations were an asset, one the company intended to develop further.

By the mid-1990s, corporate leaders came to believe that Black Hills Corporation ought to be able to deliver other services to its regional customers. Deregulation of natural gas

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and telecommunications had created an opening through which the company could capitalize on the assets already in place — equipment, easements and infrastructure, customer relationships, and billing systems. The development of the internet drove new demand for telecommunications and multimedia services, while new legislation opened the market to competition. Seeing opportunities for diversification, Black Hills Corporation decided to survey this new, digital landscape.

South Dakota had begun to deregulate telecommunications shortly after the breakup of the Bell System in the late 1980s, dividing services into three categories: fully competitive, emerging competitive, and non-competitive.⁴⁴ Congress passed the Telecommunications Act of 1996, requiring local phone companies to open their markets to new entrants and to sell access to their systems at wholesale rates. These changes accelerated competition and investment in telecommunications. New entrants, dubbed "Competitive Local Exchange Carriers," sprang up across the nation. They included newly formed subsidiaries of a number of long-standing electric power utilities.⁴⁵ Combined with the dawn of the internet age and tremendous advancements in fiber optic technologies, excitement about new opportunities created a boom in telecommunications stocks.

Following an internal effort to bolster the company's radio communication system, Black Hills Corporation looked closely at getting into telecommunications in 1998. "Our

executives met with US WEST," said Ev Hoyt, "and asked them whether they were going to bring advanced telecommunications services to the Black Hills region. Their response was 'No, we won't do that." Concerned about its own need for high-speed connections, Black Hills Corporation also feared that leaving the region on the wrong side of the so-called "digital divide" would stunt economic growth and could have a serious effect on the future demand for power.

Local civic and economic development leaders shared these concerns and encouraged Black Hills Corporation to commission a marketing study to see whether customers would buy telecommunications from their power provider rather than the incumbent telephone company, US WEST. The results were astonishing: nearly 9 out of 10 customers said they would switch to Black Hills Corporation if they could offer a 10 percent discount over US WEST.⁴⁶

These results echoed the stock market's enthusiasm for telecom investments. WorldCom's stock, for example, traded at \$17.50 a share in 1997 and was on its way to \$60 two years later. Cisco Systems, a company that made telecom routers, had seen its market capitalization increase from \$9 billion in early 1995 to \$102 billion by late 1998.47 With this market intelligence in hand, Black Hills Corporation fast-tracked plans for a new broadband telecommunications subsidiary called Black Hills Fiber Systems. After its establishment in May 1998, the new company filed an application with the SDPUC to be recognized as a telecommunications provider. At the time, Dan Landguth told the media that the company was "evaluating its opportunities."48

Four months later, Black Hills Corporation pulled the trigger, announcing on September 17 that it had decided to build a 200-mile, fiber optic backbone and a 500-mile, hybrid fiber coaxial network across Rapid City and the northern Black Hills. The \$40 million network would take 18 months to construct, and when it was done, the company's newest subsidiary — now named Black Hills FiberCom — would provide telephone, high-speed internet, and cable TV services across the Black Hills. The Rapid City Journal celebrated the investment and the spirit of deregulation, proclaiming in an editorial that the "Telecom Act is working."49

Black Hills Corporation made a number of important strategic decisions to assist the development of the FiberCom system. To provide expertise in telecommunications, Black Hills Corporation partnered with GLA International, a telecommunications consulting and engineering firm founded in St. Louis in 1992. This company acquired a small fiber optic/coaxial cable design and mapping business in 1994 and then merged with GDS, a telephony engineering and information systems company.⁵⁰ By the time it teamed up with Black Hills Corporation, GLA had ample experience building competitive, local exchange carrier networks in the United States, Canada, and South America.51

Black Hills Corporation also recruited experienced staff to run FiberCom. Jim Feehan was placed in charge of the build-out and setup of operations. Ron Schaible, who had

EXPANDING THE ENERGY HORIZON

extensive experience in the telecommunications industry, was hired to lead FiberCom. Schaible recruited a number of key managers from the telecommunications sector, but the team also included longtime Black Hills Corporation employees who were ready for a new challenge. Kyle White, for example, took over marketing responsibilities.⁵² By the time FiberCom was ready for customers in September 1999, it boasted a staff of 40.53



Fast-tracking the build-out of

its initial network and hoping to establish protocols and practices for the full rollout, FiberCom began offering service to a limited number of "practice" customers in the fall of 1999.54 As the company prepared for its full launch, Schaible encouraged employees to look for ways "to delight the customer" with more coverage, greater transmission speeds, more cable channels, and additional features.

With the launch of FiberCom, Black Hills Corporation reorganized for a new future. In October 1999, Dan Landguth announced that the company would be divided into three business units, a reorganization that would better align with evolving strategy. Ev Hoyt would continue to run the regulated utility business, which consisted primarily of the corporation's core business — Black Hills Power. Ron Schaible would oversee communications and technology, while Gary Fish would serve as president and chief operating officer of Non-Regulated Energy.⁵⁵ The company also rebranded several divisions to help Black Hills Corporation position its subsidiaries as part of an integrated energy development, production, transmission, and marketing organization.⁵⁶ All of these moves sought to improve focus and efficiency within the business, but they also helped investors understand the company and its vision at a time when stock prices were soaring.

Stock prices for technology and telecommunications skyrocketed in the late 1990s as the bulls on Wall Street proclaimed the dawn of a new era in the economy. The internet, they argued, would eliminate the need for brick and mortar stores and cut the middleman out of many transactions, all while integrating markets and lowering prices. Infected with the excitement of these possibilities, the share price of any company with "dot com" in



Community leaders joined company employees for Black Hills FiberCom's groundbreaking. Fast-tracking construction, the company began offering service in the fall of 1999.

The End of Euphoria

the name rose dramatically with each initial public offering. Along with internet stocks, telecommunications and energy trading companies rode the escalator to corporate stardom. Over watercoolers and alongside minivans at day care, investors discussed hot stocks, shared tips, and plowed their savings into the market. For a while, they were richly rewarded. From March 1999 to March 2000, the NASDAQ rose an incredible 108.4 percent.⁵⁷ But the boom could not last forever.

As early as 1996, Alan Greenspan, the chairman of the Federal Reserve Bank, warned of an "irrational exuberance" in the market. The market slowed briefly in response but quickly rebounded and rose again. By 1998, even Greenspan seemed to retreat from his earlier concerns as the Federal Reserve helped fuel a booming stock market with low interest rates.⁵⁸ In the fall of 1999, however, the market quietly began to turn as corporate insiders started selling their shares.⁵⁹ Meanwhile, small investors continued pouring money into stocks, forcing huge gyrations in the market by March 2000 with e-commerce stocks showing the biggest swings.

The much-heralded dot-com bubble burst on April 14, 2000, when the Dow Jones Industrial Average dropped 616 points and closed at 10,307. The Friday sell-off marked the end of a week when technology stocks plunged and the NASDAQ lost nearly 25 percent of its market capitalization, eliminating nearly \$1 trillion in wealth in five sessions.⁶⁰ The trouble continued, and the NASDAQ fell nearly 60 percent from its high point in early 2000 to the winter of 2001, erasing nearly \$5 trillion in wealth.⁶¹

As the 21st century opened to a bear market, the energy industry seemed stable at first. Yet, over the next two years, enthusiasm for the new paradigm — which favored traders over producers, markets over regulation, and profits over service — began to ebb. Throughout, Black Hills Corporation cautiously paddled in the economic equivalent of violent whitewater, moving ambitiously into deregulated markets, restrained only by a corporate commitment to financial conservatism. This kept investors satisfied while mitigating the risk of catastrophe. As with dot-com commerce, the power industry would learn the lessons of the "new economy" in California.

California Suffers Energy Crisis

As the stock market tumbled in the summer of 2000, California faced another set of problems. Two years earlier, on March 31, 1998, the state had implemented new rules that substantially restructured the electric utilities market. At first, this move seemed to bring about the benefits preached by champions of deregulation. Wholesale rates dropped, and with retail prices fixed, the state's largest utilities were able to recapture billions of dollars of what might have been stranded investment.⁶²

The news, however, was not all good. Careful observers saw that traders were experimenting with ways to game the system. In May 1999, for example, Enron traders purposefully created congestion in the transmission system to see if the congestion would increase



prices. It did.⁶³ By early the next year, Enron traders and others had devised a host of strategies — nicknamed "Fat Boy," "Get Shorty," and "Death Star" — that could drive up prices. Their manipulations generated enormous returns. In 2000, for example, Enron earned more than \$1 billion speculating in California's power market.⁶⁴

Weather also contributed to instability in the California power market. Drought diminished the state's hydroelectric capacity. On May 22, 2000, the state's Independent System Operator declared a Stage 2 emergency when its power reserves dropped to 5 percent.⁶⁵ The shortage rapidly drove up prices from the average of \$24 to \$40 a megawatt hour (MWH) to nearly \$750 per MWH.⁶⁶ Hurting from these increases, the state accused energy traders of manipulating the market.

Energy traders, in turn, blamed the regulators, arguing that the state had made a number of critical errors in its deregulation strategy. It had deregulated the wholesale market but maintained retail price controls. The state also told utilities that they could not enter into long-term, fixed-price power contracts, meaning utilities could not take advantage of long-term discounts and were vulnerable to fluctuations in the power spot market. In addition, traders criticized the state for failing to build any major power plants in more than a decade despite the state's booming population.⁶⁷

As California's energy crisis deepened in 2001, Gov. Gray Davis struggled to reassure residents and find power to meet the state's needs. In July he spoke at the opening of a new gas-fired Calpine power plant.

California's problems got worse in January 2001. Rolling blackouts signaled a shortage of electric power across the Golden State. Wholesale prices skyrocketed, and power generators throughout the West, including Black Hills Corporation, made record profits selling power to companies who were, in turn, selling power to meet California's needs.⁶⁸ California electric utilities suffered tremendously and ran short of cash, largely because regulators did not allow them to raise retail prices. One company, Southern California Edison, defaulted in January on \$596 million it owed to power companies and bondholders. On January 17, Governor Gray Davis issued a proclamation declaring a state of emergency, which allowed the state to procure wholesale electricity directly to supply California's major utilities. This move marked the beginning of the end for the state's grand experiment with deregulation. Within months, the state's Power Exchange was out of business.⁶⁹ But the utilities themselves were not out of the woods. The governor's move failed



Customers eagerly registered for Black Hills FiberCom's services, but high initial costs kept the company from being profitable. (Compiled from Black Hills Corporation annual reports, 1999-2002.)

to resolve the industry's pricing problems and looming credit issues. In April, Pacific Gas & Electric, the dominant utility in Northern California, filed for Chapter 11 bankruptcy.70

In the middle of the crisis, author Daniel Yergin told *Time* magazine that "the California crisis puts questions about our entire energy infrastructure front and center."71 Under pressure from the state and consumers, FERC finally imposed price controls in April. These controls would extend to all the western states in June, stabilizing the market at last.⁷²

Investigators soon discovered some disconcerting facts about the crisis. As it turned out, capacity shortages had been overstated, and California's energy-conscious consumers had actually used less energy in January 2000 than in the same month in 1999. Even at the height of the crisis, the state never used as much power as it had in July 1999. The demand for power had never exceeded the capacity of the state's generating plants. In fact, during the blackouts of January 2001, the state used 10 percent less electricity than in previous years. Finally, investigators reported that — contrary to widespread criticisms — 170 new generation and co-generation facilities had been built in California during the 1990s.73 Together, these incongruities pointed to one conclusion: the crisis stemmed from a faulty regulatory structure and energy traders who had gamed the system to maximize profits at customers' expense.

With the debacle in California, regulators across the country began to backtrack on deregulation or, at least, to be more cautious about the ways in which "restructuring" might open pathways to market manipulation.74 In South Dakota, California's troubles hardened officials' resistance to deregulation. For Black Hills Corporation and many other power companies, deregulation in California and the resulting spike in energy prices had produced record profits and created new energy marketing opportunities. But it also

highlighted the risks inherent in highly competitive markets — a lesson the company was also learning in telecommunications.

As cellular telephones and the internet fed demand for services and infrastructure, the telecommunications industry had boomed alongside the dot-com bubble. Across the country and around the world, telecom companies purchased fiber optic lines and switches to capitalize on new opportunities. Meanwhile, many electric utilities had entered this market and were also building fiber optic networks.

Just as they had grown in tandem with dot-com stocks, share prices of telecom companies suffered when the bubble burst in April 2000. Demand for data transmission had not reached the levels predicted by the industry's most vocal cheerleaders. Leading American and European companies had accumulated nearly \$700 billion in debt for telecom infrastructure, and by the spring of 2001, as an article in Business Week put it, "what once looked like the land of promise is quickly turning into a wasteland, as profits vanish, revenues slump, stocks plummet, and companies begin going belly-up."75

Black Hills FiberCom felt the effects of the boom and bust. In 1998, the company had planned to spend \$40 million on infrastructure and start up in the Black Hills. By 2001, the budget had increased to \$75 million. Frenzied demand for equipment and skilled labor at the peak of the boom drove capital spending higher still, to \$157 million. High interest payments hampered the company's ability to show a profit, and although it was still in its early stages, FiberCom represented a substantial drag on Black Hills Corporation's net income.⁷⁶ As 2001 stretched into summer and fall, the write-down of telecommunications companies represented a threat to Black Hills Corporation's stock price. For the time being, the entrepreneurial costs of entering telecom were covered by substantial profits in the highly volatile energy market, but instability did not bode well for the future.

In early 2001, what had once looked like microscopic fractures in the financial markets revealed themselves to be structural weaknesses that threatened to decimate once-soaring energy trading companies. Although an analyst at Merrill Lynch asserted that Enron was "uniquely positioned to be the General Electric of the new economy," the company's share price started to fall as journalists and others probed the company's books.⁷⁷ By Memorial Day weekend, Enron's stock had dropped from its January price of \$80 per share to \$52 a share, and it continued to plummet into the autumn. By August, Jeffrey Skilling had announced that he was resigning, and Kenneth Lay had resumed the duties of the CEO.78

Enron's problems briefly faded into the background after the September II, 2001 terrorist attacks in New York, Washington, D.C., and Pennsylvania. In response, the government shut down air travel and forced the closure of the New York Stock Exchange. Across the

Telecom Booms, Then Busts

Enron's Collapse

TOUCHED BY SEPTEMBER 11



Across the county Americans responded to the terrorist attacks of September 11, 2001. In New York to meet with investors, CEO Dan Landguth and other senior executives experienced the devastation first-hand. The heartbreaking stories of the dead and injured touched all employees. On September 13, employees gathered on the steps of the company's headquarters in Rapid City to present a check to the Red Cross Disaster Relief Fund. During the ceremony, to capture the anguish of all and the longing for an end to violence, Kyle White read the poem 'Maybe Tomorrow,' which had been published in the company's first annual report in 1942. country, citizens, including employees of Bla the victims.

Terrorism unsettled financial markets, instability that was exacerbated five weeks later when Enron revealed a \$618 million loss for the quarter. The company also took a \$1 billion nonrecurring charge to reflect the depreciation of assets and losses in partnerships created in 1999. Created to hedge investments in Enron assets, these partnerships personally benefited senior executives, particularly CFO Andrew Fastow — an arrangement that was deeply troubling to investors and, eventually, to law enforcement. At the same time, Enron decreased shareholder equity by \$1.2 billion.

The revelations of these partnerships and losses undermined confidence in Enron's stock. Within a week, Fastow had been removed from his post and negative headlines sent Enron into a tailspin. Over the next several weeks, the company's stock lost 60 percent of its value.⁷⁹

Enron's collapse hurt other energy marketing firms as well, including Kansas City-based Aquila. Two other companies, Mirant Corporation and Allegheny Energy, Incorporated, issued bankruptcy warnings in 2002, while Dynegy and Aquila told investors that they might not be able to sustain their debt payments beyond the first half of 2003.⁸⁰

Aquila scrambled to stay afloat, shutting down its Merchant Services trading operations and selling international investments and much of its Merchant Services assets.⁸¹ Moody's downgraded the company's credit rating to below investment grade in early September, and a month later, CEO Robert Green and his brother, Chairman Richard Green, felt the pressure from rating agencies, Wall Street analysts, and investors.⁸²

As government investigators combed through Enron's finances, they also turned the spotlight on the rest of the energy trading industry. In January 2004, six energy trading firms agreed to pay a total of \$50 million in fines to settle charges related to false reporting of natural gas prices. The largest penalties were assessed against Aquila and Xcel Energy, whose trading divisions were accused of attempting to manipulate natural gas prices. Aquila paid a \$26.5 million fine and Xcel forfeited \$16 million — penalties each company paid without having to admit or deny the charges.⁸³

Black Hills Corporation did not entirely escape the fallout. As part of an industry-wide investigation of trading and trade-reporting practices after Enron's collapse, the U.S. Commodity Futures Trading Commission found that some former Enserco employees had provided inaccurate information about natural gas prices and quantities to some industry publications. By September 2002, these individuals had already left the company. Black Hills Corporation cooperated fully with the government's investigation, paid a \$3 million fine, and reassured investors of its commitment "to the highest ethical standards in all of its operations."⁸⁴ That year, Enserco, like other legitimate energy trading companies around the country, took stock of its business and sought to strengthen the integrity of its processes.

country, citizens, including employees of Black Hills Corporation, rallied to provide aid to

Lessons Learned

It would be easy to paint the bursting of the dot-com bubble as a singular, catastrophic, economic event. Historically, however, the kind of over-investment that created the bubble had often followed the introduction of revolutionary innovations in technology or business processes. More than 120 years earlier, for example, the United States plunged into recession when railroad stocks collapsed after years of intense investment and construction in the 1870s.

There was, however, a bright side to this over-investment in the long term. The construction of those railroad lines, for example, eventually enabled the tremendous expansion

of the national economy in the later years of the 19th century, allowing one region of the country to move its products to other areas with relative ease. Although tech and telecom companies had suffered enormously from the fallout of the dot-com bubble, investment in fiber optic lines would ultimately produce long-term economic benefits on par with the proliferation of railroads.

The availability of bandwidth to transmit ideas and information around the globe, as writer Thomas Friedman pointed out, created a world unencumbered by geography. Accountants in India could prepare tax returns for Americans in Texas or California, sharing their work over fiber optic lines in nearly an instant. Similarly, a customer service representative in Rapid City could now troubleshoot a computer problem in Georgia, while an engineer could collaborate with other team members in multiple locations. Fiber optics, in short, offered enormous opportunities to those who could put the bandwidth to work in the 21st century.



Elster A3R Alpha Plus Electronic Meter. Introduced in the 1990s, electronic meters contained no moving parts.

After a decade of expansion and diversification, Black Hills Corporation entered the 21st century much larger than ever before, with annual revenues up from \$127 million to \$1.3 billion. Total assets had climbed from \$295 million to \$1.1 billion, while the combined values of the company's market capitalization rose from \$277 million to \$780 million. The company's workforce had also increased from 486 in 1990 to 630 in 2000.⁸⁵ These were the important factors that would carry the company forward in the new millennium.

Black Hills Corporation adjusted alongside the rest of a world that was re-evaluating the myths and realities of the so-called "new economy." The company had launched an energy trading business and moved into telecommunications, enterprises that, when compared

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to others, had emerged from the market meltdown relatively unscathed. FiberCom's buildout, for example, had been expensive, but customers in the Black Hills ultimately embraced its services with enthusiasm. There were, of course, lessons to be learned. Energy marketing, as the company was reminded after some Enserco employees shared false price information with trade journals between 2000 and 2002, brought a great deal of risk.⁸⁶

As Black Hills Corporation learned hard lessons and managed risks, the changing economy continued to bring significant opportunities. The shortages of electricity in the summers of 1998, 1999, and 2000, as well as the winter of 2001, had confirmed the company's core strategy. As Dan Landguth put it, "substantial amounts of new electric-generating capacity need to be built to relieve shortages of electricity."⁸⁷ As long as demand outstripped supply, prices would continue to rise, offering economic opportunity to power generators and their shareholders. Black Hills Corporation wanted to build that capacity. As far as Landguth, Hoyt, and their team were concerned, they were on the right track in uncertain times.

The collapse of the speculative energy trading market produced a string of failed or struggling corporations. As investor confidence in the energy sector wavered, survivors scrambled to improve their balance sheets by selling power plants and pipelines, laying off workers, and cancelling deals and projects. But for long-time utilities that had focused on core strengths, developed assets to meet the country's ever-growing demand for power, and managed their debt, the collapse created tremendous opportunities.

"I think the culture of Black Hills is one of...patience and of looking for long-term value, and we value partnerships."

THOMAS M. OHLMACHER, PRESIDENT AND CHIEF OPERATING OFFICER OF THE NON-REGULATED ENERGY GROUP

CHAPTER NINE



CHAPTER NINE - A NEW POTENTIAL



hroughout the 1990s, Black Hills Corporation had wisely added power plants in Wyoming. The company expanded its generation capacity and established a solid position in the energy trading markets. When the first years of the new millennium delivered price spikes for natural gas and electricity, Black Hills Corporation As opportunities expanded in the energy industry, oil and gas development became increasingly important.

earned record profits. In 2000, independent energy sales generated more than \$29 million in revenue and accounted for 44 percent of the company's positive net income.¹ When the California energy crisis sent prices towards the moon the next year, independent energy sales more than doubled to nearly \$60 million.² Management cautioned shareholders that this unusually bullish energy market would not last forever.³ Indeed, after the state and federal governments stepped in, prices and profits stabilized.

Record earnings, nevertheless, allowed the company to aggressively advance its strategy. Over the next several years, Black Hills Corporation acquired or built power generation assets in Colorado, New Mexico, Nevada, and California — well outside its traditional service areas. It continued to increase fuel production in coal, oil, and natural gas. While other energy marketers failed following the Enron collapse, Enserco delivered dependable service to its customers and profits to Black Hills Corporation shareholders. For the first time in a generation, because of the turmoil in the industry, the company could look at expansion through acquisition and by building power plants.

BRIDGES OF COMMUNITY SERVICE



On a Saturday in September 1995, two dozen Black Hills Corporation employees volunteered to rebuild two railroad bridges near Hill City. They measured and cut wood, laid plans, and nailed side rails to help convert the abandoned Burlington Northern railroad bed into a 114mile recreational trail for pedestrians and bicycles traveling through the Black Hills.

With corporate prosperity tied to the health of the local economy and a culture rooted in Western traditions of cooperation, the company and its employees have long been generous with volunteer hours and resources. In an average year in the 1990s, the employee newsletter reported on efforts to raise money for the March of Dimes, partnerships with local schools, contributions to scholarship funds, pro-bono electrical work for a Little League baseball field, equipment donation to public agencies, and more.

For decades, the community also played a major role in local economic development efforts organized by chambers of commerce and government. Its employees served in positions of community leadership and even in the state legislature. On and off the job, the tradition of service was woven deeply into the fabric of the company's culture

CHAPTER NINE - A NEW POTENTIAL

In 1994, Black Hills Corporation had announced plans to build Wygen I, an 80 MW plant identical to Neil Simpson II, but the company struggled to find customers, and construction was delayed. In 1996, a key part of this plan — a partnership with Calpine Corporation of California - dissolved because Calpine decided to focus on building gas-fired plants after new state regulations prevented companies from importing coal-fired energy into California.⁴ But as natural gas prices rose and system reserve margins in the electric industry declined, Black Hills Corporation saw an opportunity. The construction industry was in recession and electric power prices were rising. In 1999, the company announced that it would move forward with Wygen I, with revised plans to make the plant a 90 MW, mine-mouth, coal-fired plant.

2250MW 1500MW 2002 1991 750MW 0MW Coal Gas

Natural gas-fired power plants accounted for most of the growth in generating capacity in the U.S. between 1991 and 2002. Coal, however, continued to be the major fuel source for the country's conventional power plants.

The company hired Babcock & Wilcox — the boilermaker that had built the original Wyodak Plant and supplied the boiler for Neil Simpson II – to oversee construction. Eager to help revive the market for coal-fired power plants, officials

at Babcock & Wilcox predicted Wygen would set a standard for future power-development projects around the world.5 With capacity to burn an annual 500,000 tons of low-sulfur coal fed by conveyor from the Wyodak Mine, the plant was expected to be a mirror image of Neil Simpson II.⁶ The advantageous market conditions meant production costs for Wygen I would be in the lowest 5 percent of coal-fired plants in the United States.7

Without question, building Wygen I encompassed major risks. The western power markets were volatile, and state and federal officials were pushing for state-of-the-art, pollution-control technology in response to growing public concerns about the environment. And Black Hills Corporation still needed to raise capital for construction.

Acquiring Indeck Capital

When Black Hills Corporation moved into the independent power producer (IPP) market in 1999, it teamed with a group called Indeck Capital. Together, they bid on several plants that Montana Power was looking to sell. Although they did not win these bids, the two organizations had forged a strong partnership.8

Originally organized as a relatively passive investment company, Indeck had grown more aggressive. By 2000, it owned partial interests in 14 independent power plants in California, Massachusetts, Colorado, New Mexico, and Idaho. Although Indeck's plants carried more than 350 MW of generation capacity, the company found itself increasingly limited by its lack of operational expertise and access to equity capital.9 For its part, Black Hills Corporation had organizational talents and could sell stock, and saw that it could leverage Indeck's assets.¹⁰ In other words, both organizations would benefit from a merger. In the summer of 2000, Black Hills Corporation announced that it would take this collaboration to the next step by acquiring Indeck and renaming it Black Hills Energy Capital. The acquisition brought personnel changes and new challenges to Black Hills Corporation. Indeck's John Salver became president and chief operating officer of Black Hills Energy Capital, and Gerald Forsythe, Indeck's majority shareholder, joined the board of directors at Black Hills Corporation. Forsythe, a well-known auto racing financier, was an aggressive risk taker and entrepreneur with over three decades of experience equipping steam and electric power-generating plants.¹¹ Along with integrating these new team members, Black Hills Corporation had to learn about competitive and regulatory issues in a host of different states, all while developing the capacity to effectively manage its growing array of new businesses.

These were healthy challenges that helped Black Hills Corporation develop its skills and core competencies. But the Indeck deal also revealed the hazards that could accompany new business partnerships — even those that begin on friendly terms. When Black Hills Corporation bought Indeck in 2000, the agreement included an immediate cash payment to Indeck's shareholders along with a significant amount of "earnout" stock to be paid over the course of four years. Black Hills Corporation issued this compensation to Indeck's former owners — including Salyer and Forsythe — in 2000 and 2002. In 2003, however, some former Indeck owners refused to take their earnouts. They asserted that Black Hills Corporation had incorrectly calculated what was owed, underpaid Forsythe and others, and refused to share documentation of the earn-out calculations.¹²

The dispute quickly escalated. Salyer left the company in February 2004, and shortly thereafter, he and his former partners filed two related lawsuits against Black Hills Corporation. The litigation dragged on in courtrooms in Illinois, since Indeck had previously been based in Chicago. Over the next four years, Black Hills Corporation would maintain that it had acted in good faith during and after the merger. The suit was eventually settled in March 2008 and finalized in early 2009.¹³ For Black Hills Corporation, this process taught a valuable lesson about the possible perils of partnership.

Moving Forward

As the dot-com, telecom, and energy trading industries suffered massive devaluations in 2000 and 2001, Black Hills Corporation made a series of strategic moves. In the first half of 2001, the company promoted Ev Hoyt to president and chief operating officer.¹⁴ Meanwhile, Kyle White became vice president of Corporate Affairs and Tom Ohlmacher was promoted to senior vice president of Power Supply and Services.¹⁵

The company's relationship with Wall Street evolved alongside its management team. By 2001, the company sorely needed capital: investment continued in the expansion of FiberCom, Wygen I was under construction, and the company aggressively pursued new IPPs. But it could not take on new debt without raising equity, so corporate leaders began to recognize the need for revisions to the corporate structure.



CONNECTING THE GRIDS



Rapid City lies close to the boundary point between the eastern and western electrical grids in the United States. In 2001, the two grids connected in only five places. Opportunities to exchange power between the east and the west were limited and this situation contributed to the power shortage in California and the West. That year, Basin Electric Power Cooperative and Black Hills Power reached an agreement to work together to build an intertie just outside of the city. Completed in 2003, the 200 MW back-to-back intertie allowed Basin Electric to better serve its cooperative customers in Wyoming and South Dakota. For Black Hills Power, the tie enhanced system reliability and provided more opportunities to sell wholesale power to customers in the East, as well as the West.

As a regulated utility, Black Hills Corporation had to seek regulatory approval whenever it wanted to approach the capital markets, even when the equity would not be used for the utility. Making Black Hills Corporation a holding company, however, would provide more financial flexibility. When the board of directors made this change in 2000, Black Hills Power became one among several entities owned by Black Hills Corporation.



Under this new structure, and swelling with ambition to expand in the IPP market, the company filed a plan to offer 3 million shares of common stock in March 2001. The company's independent energy group would use the proceeds from this offering to acquire, expand, and construct power plants and to acquire oil and gas reserves.¹⁶

To help sell these shares, Dan Landguth promoted Mark Thies to senior vice president and chief financial officer. A Chicago native who grew up in Davenport, Iowa, Thies had worked for Arthur Anderson in Chicago and then a non-regulated energy firm in Iowa. In 1997, he interviewed to become the controller at Black Hills Corporation, accepting the offer because he was interested in the company's ambitious plans to grow and diversify.¹⁷

Black Hills Corporation also courted the fund managers who were playing an increasingly important role in the stock market. Because the IPP market was high-risk, high-reward, it was more attractive to institutional investors who managed large stock portfolios and were better able to absorb the impact when risky ventures went south.¹⁸

Black Hills Corporation's investment bankers first proposed a stock offering at under \$40 a share, but after Landguth, Thies, and Fish encountered strong interest from potential investors as they traveled the country, they pushed for a higher price. With California's problems and power prices spiking, record earnings in the energy sector drew attention just as other sectors of the stock market struggled. According to Landguth, investors looked at the company and said, "Geez, these guys have a lot of power, paths to get it to market, and great markets," seeming to assume that it would stay that way forever. "We had to really make clear," he continued, "that a market can change."19

Through the spring of 2001, the Black Hills Corporation team continued their grueling road show. In one week in April, they gave nearly 50 stock offering presentations to nearly



Mark Thies, Dan Landguth, Gary Fish and investment banker Bruce McClendon posed between meetings with investors in New York.

during that period, Black Hills Corporation invested the first portion of its new capital in Wyoming. With the construction of Wygen I set to begin in March 2001, the company announced it would begin permitting yet another coal-fired plant at Wyodak, this time called Wygen II. It also completed construction of a new, 40-MW, gas-fired plant at Wyodak to provide power to an Xcel Energy subsidiary called Cheyenne Light, Fuel & Power under a ten-year contract.²³

Hoping to deploy its power-generation skills in other markets, in February 2001, Black Hills Corporation also announced that it would buy a 240 MW, natural gas-fired power plant from Enron that was under construction at Fountain Valley near Colorado Springs. The deal came with an 11-year power contract to supply another Xcel Energy subsidiary, the Public Service Company of Colorado.²⁴ The project would be relatively quick and painless to complete and would provide room for additional growth. Construction would cost nearly \$175 million and would be done by July. From Fountain Valley, Black Hills Corporation would be well-positioned to serve other markets across the Rocky Mountain region and the Southwest.²⁵

Shortly after Fountain Valley began producing power in August, the company completed the acquisition, also from Enron, of a 273 MW, gas-fired plant northeast of Las Vegas. The facility had two plants, a 51 MW co-generation facility called Las Vegas I and a 222 MW expansion called Las Vegas II under construction. These deals added more than 600 MW of power generation capacity to Black Hills Corporation, meaning the company was well on its way to meeting its goal of adding 1,000 MW of wholesale capacity.²⁶ Just as importantly, each of these new facilities was linked to long-term "tolling" contracts with wholesale customers. Under these agreements, the power purchaser provided the natural gas fuel and assumed risks associated with fuel prices — a strategy the company could take to the bank.

Once it had acquired the Colorado plants, Black Hills Corporation decided to relocate Black Hills Energy Capital to the Denver area so its employees would be closer to potential wholesale and power plant customers. As part of the move, Tom Ohlmacher, who was already overseeing the company's Power Supply divisions, became president and chief operating officer of Black Hills Energy Ventures.²⁷ In this new position, he would supervise the company's Fuel Resources Group — BHEP and WRDC — as well as Black Hills Energy Capital and Enserco Energy.²⁸

Selling Coal Still Fuels Growth

Throughout the tempestuous transition from the 20th to the 21st century, Wyodak coal continued to fuel the company's growth. It powered the Neil Simpson plants and a plant operated by PacifiCorp and would soon feed the new Wygen Plant. But as spot coal prices dropped, tensions rose between PacifiCorp and Black Hills Corporation, jeopardizing this important revenue stream.



additional shares were eventually issued at a price of \$52 a share, quickly rising another 17 percent.²¹ Just as quickly, however, the energy market cooled and a single share of "BKH" — the company's ticker symbol on the New York Stock Exchange — fell back to \$40. When Wall Street asked about the drop, company executives had to remind nervous investors, as Thies said, "Hey, we told you this would happen."

Acquired under construction from Enron, the 240 MW, gas-fired Fountain Valley plant in Colorado started producing power in August 2001. Dan Landguth called it "a model of our independent power strategy."

New equity meant the company could also take on new debt. In September 2001, Black Hills Corporation reached an agreement with three major banks on a \$400 million revolving credit facility that would also provide cash for investment.²² With a stronger balance sheet, the company was ready to look for assets offered by companies that had failed to navigate the stormy seas of deregulation.

Expanding in the IPP Market

When it received its new credit facility in 2001, Black Hills Corporation had been operating in the Powder River Basin for over four decades. True to the pattern it had established



Expanding the Oil and Gas Business

As Black Hills Corporation entered the 21st century, the patient development of its oil and gas operations began to pay off. In October 2002, the company announced that it would acquire Denver-based Mallon Resources Corporation in a stock-for-stock merger — the company's first acquisition of a publicly traded company. Mallon, an oil and gas company, had both proven and unproven reserves of oil and natural gas. Active in petroleum exploration and development in New Mexico since 1982, Mallon had expanded aggressively in the 1990s, acquiring additional interests in the San Juan Basin and East Blanco fields. In 1998, the company increased its East Blanco acreage by entering into a development agreement with the Jicarilla Apache Tribe. Mallon raised \$48.1 million in capital through stock sales and obtained debt financing from Aquila Energy Capital to finance its expansion.³⁰ Buying Mallon Resources would give Black Hills Corporation its first platform for large-scale natural gas drilling.³¹

But the \$53 million deal almost fell through at the last minute. As part of the transaction, Black Hills Corporation had agreed to pay off at a discount the \$30.5 million debt that Mallon owed to Aquila Energy Capital Corporation.³² The agreements were set to be executed in October. On the scheduled date for settlement, Dave Emery was in wake of Enron's collapse. Denver waiting for Aquila's CEO Robert Green to sign and send the paperwork from Kansas City. He grew nervous as the fax failed to arrive and changed his flight home to Rapid City several times because of the delays. Meanwhile, the staff at BHEP struggled to find out what was going on at Aquila's headquarters.

Finally, late in the day, the fax arrived. The signature of the CEO, however, took Emery by surprise. Aquila's board chairman, Richard Green, had replaced his brother, Robert, as Aquila's CEO that day in yet another sign of instability that racked the collapsing energy sector. Although Emery could not have known it at the time, Robert Green's downfall and Aquila's troubles would later create an enormous opportunity for Black Hills Corporation.

The contract between PacifiCorp and Wyodak Resources Development Corporation (WRDC) had a built-in price escalator that benefited Black Hills Corporation as coal prices dropped. The coal price had been further increased as part of a settlement after PacifiCorp cancelled a take-orpay coal contract to fuel the Wyodak II Power Plant, which Black Hills Corporation had decided not to build. Driven by these factors, PacifiCorp paid Wyodak more than \$10 per ton in 2000, even as the spot price had dropped to under

At the East Blanco Field on the Jicarilla Apache Reservation in New Mexico, workers repaired a natural gas well. A critical asset, the East Blanco operation became part of Black Hills Exploration & Production in 2003 when the company acquired Denver-based Mallon Resources.

\$4 a ton. As Wyoming regulators pressed PacifiCorp to lower its fuel costs, the company threatened to back out of its Wyodak contract, and litigation ensued.

The two sides finally reached a settlement in April 2001. PacifiCorp agreed to make a lump sum payment to WRDC, which in turn agreed to reduce the price of the coal. But PacifiCorp also agreed to an increased minimum annual coal purchase for the Wyodak Plant and an extension of the coal supply agreement from 2013 to 2022. At the same time, PacifiCorp promised to buy WRDC coal for its Dave Johnston Power Plant near Glenrock, Wyoming. These shipments would be served with WRDC's train loadout facilities, which the company had acquired from Kerr-McGee with the purchase of the Clovis Point Mine.²⁹ Settling this dispute with PacifiCorp provided a short-term boost to WRDC's earnings and





Richard Green, a descendent of the founder of Missouri Public Service. served as chairman of Aquila as the company struggled to stay afloat in the

"To say that the energy industry is tumultuous right now is an understatement. It has been a wild ride over the past few years.... There is a 'back to basics' movement, but we're proud to say we have never left the basics."

DAVID EMERY, CHAIRMAN AND CEO

ACK HILLS COLORADO, LLC.

As Black Hills Corporation focused on its core strengths in the first decade of the 21st century, the company prepared to usher in a new generation of leaders. Together, the executive team at Black Hills Corporation evaluated the changes rippling through the energy industry in the wake of the Enron scandal and the California energy crisis and began to chart the company's strategy. By gradually divesting non-core assets and acquiring businesses whose operations aligned with the company's strengths, Black Hills Corporation retooled to meet the demands of a new era.

CHAPTER TEN





y the fall of 2002, many Americans were worried B about the future. The events of 9/11, combined with the bursting of the dat the bursting of the dot-com bubble and the crises and scandals in the energy industry, fed a great deal of uncertainty. The invasion of Afghanistan coupled with President George W. Bush's call for regime change in Iraq

The company acquired an interest in the South Glens Falls hydroelectric plant on the Hudson River in New York as part of its acquisition of Indeck Capital.

fueled fears that the United States would be engaged in a protracted war in the Middle East. With these events dramatically increasing demand for fuel, prices for energy commodities like oil, coal, and natural gas began to rise.¹

As Black Hills Corporation's leaders studied the aftermaths of the California energy crisis, the collapse of Enron, and 9/11, they began to exit non-core businesses that were not creating value for either customers or shareholders. Black Hills Coal Network, for example, had been purchased in an attempt to sell Wyodak coal to markets east of the Mississippi, but the business had struggled to get off the ground. In 2002, Black Hills Corporation sold this business at a \$1 million loss.² The following year, the company sold its ownership interests in seven hydroelectric plants in upstate New York for \$186 million to refocus on the Rocky Mountain and western territories. In May 2004, the company also unloaded a subsidiary called Landrica Development Corporation, which owned a coal-enhancement plant.³ The next year, it sold a power plant in Massachusetts. And in 2006, it sold Black Hills

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Energy Resources, a Houston-based, crude oil-marketing and pipeline transportation company, to Sunoco Logistics Partners because, according to Emery, Black Hills Corporation was seeing better results in marketing natural gas.⁴

As Black Hills Corporation assessed its various non-core businesses, none posed more challenges than FiberCom. Many electric utilities were in trouble after following the herd into the telecommunications market in the late 1990s. For its part, FiberCom had enjoyed remarkable penetration rates in the Black Hills, but in 2002, it still faced an uphill Black Hills FiberCom network climb. Burdened with high capital costs as a result of the building frenzy in 1999, the company was challenged to turn a profit despite robust and successful marketing efforts. At the same time, other unexpected challenges arose. Black Hills Corporation had expected sluggishness from US West, which had previously held a monopoly on telephone service in the area, but they had not anticipated Digital Divide." just how slowly US West would move to install newly required interconnections that were critical to FiberCom's service.5 Black Hills Corporation also foresaw cable TV competition from Midcontinent Communications, which had purchased TCI's operation in the Black Hills, but had not expected how quickly Midcontinent would move into the marketplace with bundled cable, internet, and telephone services.⁶

Despite these challenges, FiberCom had become the dominant communications provider in Rapid City and the northern Black Hills by 2002, garnering more than 20,000 residential and 2,500 business customers. The company connected an average of 800,000 local and long-distance calls per day and delivered over half a million emails. Building on Black Hills Power's long tradition, FiberCom's 150-person staff prided itself on good customer service. But Fibercom still struggled to turn a profit on its total capital investment, which topped \$150 million.7

Cultural tensions exacerbated FiberCom's situation. Employees worked feverishly in an industry exploding with demand and investment and regarded their counterparts in the electric utility business as "slow moving and overstudied." Meanwhile, the Black Hills Power team viewed FiberCom executives as "reckless spenders of the company's capital."8 Tensions also emerged between Black Hills Corporation's board of directors and its executive leadership.9



engineers worked to keep up with the demand for service. The company's leadership in providing broadband to rural communities was recognized in 1999 when Senator Tom Daschle asked Black Hills FiberCom to provide the rural telecommunications perspective at a CEO Summit entitled "Closing the

Dan Landguth fought to keep everyone working together. He asked Ev Hoyt to play a larger role in the company's operations. "We had a very, very capable management team in Black Hills Power," Hoyt said, "so I felt very confident that they didn't need day-to-day attention." So instead, Hoyt worked with the FiberCom team to reduce operating costs.

Hoyt also looked for additional investors, who would diminish the immediate burden of the company's capital investment and provide a longer-term payback. Hoyt even talked with Aquila's telecommunications subsidiary executives about a strategic merger with FiberCom. The deal fell through when Aquila wanted to buy FiberCom in an all-stock transaction.¹⁰ Meanwhile, Hoyt and his team explored regional expansions that might garner more economies of scope and scale.

In April 2003, Landguth and Hoyt named Dave Emery president and chief operating officer for retail electric utility and communications operations at FiberCom. Emery's primary goals were to make FiberCom profitable, largely through aggressive cost control; to increase scrutiny of capital investments; and to facilitate the integration of the customer service and billing operations of Black Hills Power and FiberCom. Launching these efforts in the summer and fall of 2003, Emery recruited Linden "Linn" Evans, a one-time mining engineer at Homestake who later earned a law degree and joined Black Hills Corporation as a corporate attorney in 2001. Evans took over the day-to-day management at FiberCom as vice president and general manager. Leveraging his experience in the mining industry, Evans worked to cut costs and run FiberCom's business as efficiently as possible.

Black Hills Corporation approached the integration of FiberCom and Black Hills Power's customer service operations with extreme caution, carefully planning to achieve economies of scale and provide enhanced services without overstepping any regulatory boundaries. To avoid transfer pricing issues, Black Hills Power worked to ensure that nothing it did could be characterized as subsidizing FiberCom's competitive operations. It also gave the South Dakota Public Utilities Commission (SDPUC) an explanation of its concept and a clear rationale for the integration. Rather than balking at the idea, regulators appreciated the initiative and dialogue and the attention to the potential benefits for customers. The SDPUC surprised company officials when they asked "why we hadn't considered it before."11

Despite these efforts, FiberCom reported a net loss of \$5.9 million in 2003. Over the next year, the team doggedly pursued synergies with Black Hills Power and plugged away at improving financial performance.

Investing in Power Generation

As Black Hills Corporation fine-tuned its approach to non-core ventures, Dan Landguth believed that building and operating power plants remained the key to creating shareholder value. Power production was costly and required heavy investments in construction, technology, and workforce as well as a long-term commitment to cultivating healthy

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relationships with regulators. Black Hills Corporation had core competencies and competitive advantages in these areas. Between 2001 and 2003, it sought to put them to work.

The company focused first on completing power plants at Fountain Valley and Arapahoe in Colorado. It then launched Las Vegas II and dedicated its new, 90 MW Wygen I Plant in Gillette shortly thereafter.¹² Completed under budget and ahead of schedule, Wygen was "the model of our potential," Landguth told reporters. With reasonable capital costs and an affordable fuel supply, the company looked good to shareholders.

"We intend to continue to advance our competitive generation capabilities in the years to come," Landguth said.¹³

With Landguth and Hoyt at the helm in Rapid City, Tom Ohlmacher played a pivotal role in shaping corporate strategy from his new office in Denver. As its name suggested, Black Hills Energy Ventures embodied the entrepreneurial spirit still held over from the diversification efforts of the 1990s. By the middle of 2002, when Ohlmacher left for Colorado and in the aftermath of the Enron scandal, legislators began to tighten the reins on the once unbridled energy markets, but opportunities still existed. Ohlmacher worked to fold the operations of Black Hills Exploration & Production, Black Hills Energy Capital, and Enserco into a single, core strategy that was both vertically and horizontally integrated. Ohlmacher and his team streamlined the production of oil, gas, and electricity. Putting those resources to use for customers and for the energy markets created shareholder value, while customers benefitted from the cost savings produced by the overarching integration plan.¹⁴

Just under 350 miles north from Ohlmacher's office, the Wygen Plant reflected another element of Black Hills Corporation's competitive advantage: environmental stewardship. Environmental concerns were increasingly important to customers, the federal government, and states like Wyoming. Realizing that any new power plants would have to meet or exceed new government emissions standards, Black Hills Corporation incorporated state-of-the-art environmental controls into the design of the Wygen Plant to minimize sulfur dioxide and nitrogen oxide emissions and to meet Wyoming's strict standards. Wygen was the first coal-fired power plant built in the 21st century. Arguably the cleanest coal-fired power plant in the United States, it was nominated for a clean air award from the Environmental Protection Agency.¹⁵



PrairieWave's unexpected offer to buy FiberCom for its book value offered Black Hills Corporation a sound exit from a business venture that had struggled to turn a profit.

Not Everything Follows the Plan

Ev Hoyt and Dan Landguth were an impressive team and had secured the absolute confidence of the board of directors. A few years older than Landguth, Hoyt planned to retire in the fall of 2004 when he reached the age of 65. The board hoped that his replacement would be appointed at that time and would then gradually train to succeed Landguth as CEO. These plans were disrupted one morning in March 2002 when Hoyt called the board to inform them that Landguth had suffered a heart attack.

"The news sent us into a whirlwind of activity," said Kay Jorgensen, a long-time board member from Spearfish. "We had to figure out what was the right thing to do."¹⁶

After speaking with his doctor, Landguth called John Howard, the lead director on Black Hills Corporation's board, to deliver some hard news. "I don't think my health is going to permit me to continue," he said.

The board of directors hired an outside firm to search for a new CEO. They interviewed internal and external candidates over the course of several months. During this time, however, Landguth made a remarkable recovery. In a heart-to-heart with the board, he said, "I think I'm just fine. I want to keep going for a couple more years."¹⁷ The board agreed to his plan but also continued planning for succession.

The ascension of a new generation of leaders became visible in a series of promotions in the spring of 2003. In addition to Emery and Evans' respective positions in Retail Electric Utilities and Communications at FiberCom, John Salver — who had come from Indeck Capital and had led Black Hills Corporation's non-regulated Power Generation subsidiary since 2000 — was promoted to executive vice president in charge of Strategic Planning and Development. Mark T. Thies became executive vice president and chief financial officer, Russell Cohen moved to senior vice president for Risk Management, and Garner Anderson became treasurer.

Landguth, Hoyt, and the board of directors evaluated these leaders alongside some impressive outside candidates. They concluded that Emery was the best suited to become the next CEO of Black Hills Corporation. He had deep family roots in the company and the region and had managed various fuel resources businesses, including both coal mining and oil and natural gas exploration and production from 1997 to 2003. Leading Black Hills Power and FiberCom after that gave him greater exposure

CLOSER TO COLORADO MARKETS



The creation of Enserco in 1996 gave Black Hills Corporation a presence in Colorado. As the company's independent energy business continued to grow, the need to be closer to customers and industry stakeholders in the Rocky Mountain region became apparent. In 2001, Landguth and his team decided to consolidate the company's power generation and energy trading subsidiaries into one strategic location in Golden, Colorado.

Integrated under the business name Black Hills Energy, Inc., the new team included Black Hills Energy Capital (formerly based in Wheeling, Illinois), Black Hills Generation and Enserco. Under one roof, Black Hills Energy had the ability to finance, develop, and market fuel and power to buyers throughout the region.

Although the move made strategic sense for the organization, it was difficult for some long-time employees who had deep roots in the Black Hills. Others embraced the change of scenery and new opportunities in Colorado.

The establishment of a major employee center outside the Black Hills also created new challenges for management as it sought to cultivate a common culture and sustain the organization's vision and values.



The company honored Dan Landguth and Ev Hoyt by commissioning a painting depicting the two men fly fishing, Titled "Time Together," the work of art by James Van Nuys was unveiled at Hoyt's retirement party in May 2004. Many of the attendees wore bow ties to honor Hoyt's favorite attire.

to the regulated side of the business and to the challenges of delivering outstanding service to the company's customers. He seemed the strongest candidate to lead the company forward.

With the plan established by January 2004, Landguth was prepared to announce that Emery would succeed him as CEO while he remained as chairman of the board. Hoyt would step down as president but continue as chief operating officer until his planned retirement later in the year.¹⁸ Corporate communications generated the press releases, but Landguth instructed them to hold off for a day. Black Hills Corporation had other news to announce.

Growing Horizontally: Cheyenne Light, Fuel & Power

The Black Hills Power team had always excelled at running their utility operation. After six long decades of consolidation in the first part of the 20th century, the regional utility industry had stabilized, creating few new opportunities for acquisitions and mergers after the 1960s. Although some markets would remain deregulated for years to come, the ardor with which many players in the energy industry had approached deregulation waned dramatically, and regulators moved to restabilize markets after the California energy crisis and the collapse of Enron. New rules created new opportunities. Unlike many of its com-

petitors, Black Hills Corporation had survived the era without shedding productive assets, taking on enormous debt, or unduly exposing itself to volatile fuel or energy markets. It was relatively well-positioned to aggressively acquire other utility companies by 2004.

Geography was important. "The way we do business with our community approach, our regulatory approach, our face-toface customer service," Emery explained, "all of those things are much better suited for the northern Great Plains and Rocky Mountain demographic." And if utility acquisitions could be made close enough to the Black Hills region, the company could leverage its investments in fuel production and power generation.¹⁹

Since 2001, Black Hills Corporation had supplied electricity to Cheyenne Light, Fuel & Power and its customers in Wyoming's capital city.²⁰ Black Hills Corporation already knew the Wyoming regulators, but its relationship with Chevenne Light had provided an opportunity to become even more intimately acquainted with the local market. Some senior leaders — like Tom Ohlmacher, who had a hand in much of the company's power generation, presided over the unregulated businesses, and was a key part of the



Built in 1994 and acquired by Black Hills Corporation in 2001, the Las **Vegas Cogeneration Power Plant** was powered by natural gas-fired turbines. The waste heat from the turbine exhaust was used to warm on-site greenhouses, allowing them to produce tomatoes throughout the winter. This innovative strategy complied with PURPA provisions requiring that at least 5 percent of the energy produced by cogeneration plants be used for something other than generating electricity.

EXPANDING THE ENERGY HORIZON

strategic planning team for independent power — understood that building power generation for Cheyenne Light would create a tight bond between the two companies and, if the circumstances were right, could open the door to an acquisition. "Tom always had in the back of his mind that once you got into their business," Kyle White said, "there might be an opportunity later to acquire Cheyenne Light and grow our business."²¹

Ohlmacher's instincts were dead on. Cheyenne's parent company, Xcel Energy, had been hit hard by the collapse of the speculative energy market and was looking to shed assets to raise cash. On January 13, 2004, Black Hills Corporation announced that it would buy Cheyenne Light, Fuel & Power from Xcel Energy, acquiring approximately 38,000 electric and 30,000 gas customers.

The purchase was attractive for a number of reasons. Twenty-five years earlier, Cheyenne Light, Fuel & Power had closed an obsolete plant and begun purchasing power. When its electric supply contract expired in 2000, however, wholesale prices were at an all-time high. To soften the blow on customers, the Wyoming Public Service Commission (WPSC) had paced out the cost of new power purchase contracts with Xcel Energy's subsidiary, the Public Service Company of Colorado, and Black Hills Energy. The contract with Public Service Company of Colorado was due to expire in 2007.²² After that date, Black Hills Corporation would be able to provide additional power from its own generation plants.²³ The deal also gave Black Hills Corporation the opportunity to acquire Chevenne's gas distribution utility. Running this enterprise would provide insights into a new line of business.

A Strategy Anchored in Tradition and Expertise

As the Cheyenne Light, Fuel & Power deal proceeded, Black Hills Corporation's new CEO, Dave Emery, called a special meeting. In the early spring of 2004, Emery and his direct reports headed to Deadwood – where their company was established – to discuss the future of the business. "I wanted to just go through everything from scratch," Emery remembered. "And so we sat down and we spent probably two or three days" talking through the strengths and weaknesses of all of Black Hills Corporation's business segments. "Of all the things we do," Emery asked, "what do we do best?" Running regulated utilities landed at the top of the list.



Wygen I under construction in 2002. One of the cleanest coal-fired power plants in the U.S., Wygen I was nominated for an EPA Clean Air Award after it went online in 2003.

Emery and his team sketched the contours of a long-term strategy. They agreed to focus on strengthening Black Hills Corporation's utilities segment. This meant carefully evaluating each non-utility business by asking whether it complemented the utilities-focused strategy or could be divested over time. Emery and his group also understood that refocusing on utilities could create opportunities for new acquisitions — like the Cheyenne Light deal that was already underway — to add to the company's portfolio. When Black Hills Corporation finalized its five-year strategic plan in the summer of 2004, the document included a line underscoring its intention to "purchase other, regulated, electric utility properties" across existing service territories.²⁴ Over the next 15 years, these decisions would lead to new opportunities and extraordinary growth.

Strengthening General Administration

While the Cheyenne Light acquisition moved forward and Black Hills Corporation's leaders mulled over their newly articulated vision, they realized the need for a strategic reorganization that would prepare the company for further expansions down the road. Corporate leaders decided to form a subsidiary called Black Hills Service Company, which would house all of the support functions that were previously managed by individual departments or contracted out. The service company encompassed a broad range of functions, including finance and accounting, tax planning, corporate affairs, information technology, human resources, and regulatory and governmental affairs.²⁵ This new structure was designed to strengthen central control, improve efficiency, reduce costs, and enhance the capacity of the company to grow.

Enhancing legal services was critical to this new administrative structure. Black Hills Corporation had long outsourced its legal work. For years, attorney David Morrill of Morrill, Thomas & Braun had played a critical role in the company's development, although he was never an employee. As Morrill approached retirement in the late 1990s, the legal and regulatory environment was becoming ever more demanding, and it made sense to create an in-house legal team. Attorney Steve Helmers had joined the company as the first in-house general counsel in 2001. He gradually added other staff to meet the company's needs, and the legal team played a key role in closing the acquisition of Cheyenne Light, Fuel & Power in January 2005.²⁶

As it prepared to take over Cheyenne Light, however, Black Hills Service Company quickly encountered a tangled mess. Under Xcel's ownership, Cheyenne Light had adopted a new customer billing system in June 2004. The system was rife with billing errors caused by inaccurate customer billing information, slow responses to customer complaints, and other inconsistencies. Installing a record number of new meters had compounded these problems.

"We closed that transaction on January 21, 2005," Kyle White recalled, "and at that point in time, customers were standing in the streets, trying to get through the door to talk to our customer service reps." The billing system had been designed for a much larger company

A PERMANENT FOUNDATION FOR GIVING



Giving back to the community has always been a core value and a key strategy for Black Hills Corporation. After earning record profits in 2001, the Board of Directors created the Black Hills Corporation Foundation to ensure that the company's investments in community and quality of life would continue despite the ups and downs of the regional economy and the energy industry.

To provide the initial corpus for the foundation, the Board of Directors authorized the transfer of 100,000 shares of the company's common stock to the foundation. CEO Dan Landguth emphasized the company's deep commitment to its customers and communities in his announcement. "The roots of our corporate success lie deep within the Black Hills," he said. "I am excited that the new foundation will enlarge our corporate commitment to community partnerships in the communities we serve and live in."

Over time, the foundation's corpus has grown with additional contributions from the company. The foundation has provided grants to a variety of organizations and activities. Meanwhile, the company has continued to provide donations for community activities that build customer awareness and reinforce the company's image as a good corporate citizen.

and did not scale down well. Then, the customer service team fell behind. At the time, Chevenne Light was still a traditional utility with a "doors open, friendly, quiet, Main Street presence." They simply did not have the capacity to handle the volume of customer questions and associated billing concerns.²⁷

Initially, Cheyenne Light's problems were bigger than anyone at Black Hills Corporation fully understood. Stuart Wevik, who led Black Hills Corporation's integration of Chevenne Light, remembered getting an important call about the Chevenne Light deal while waiting in line at his bank's drive-through window. As the phone rang, Wevik knew that the caller was either going to tell him that Black Hills Corporation had closed the Chevenne Light deal or that it had fallen through at the last moment.

"As I was looking at the caller ID," Wevik remembered, "I thought, 'What do I want the answer to be?" By this time, Wevik and others had started to realize that the customer service issues were substantial. "Yet we had spent so much time on the integration planning," he said, and Cheyenne Light promised to become "a great addition to the company." When he learned the deal had gone through, Wevik was relieved, but he quickly discovered that Cheyenne Light's problems were worse than he or anyone else had anticipated.28

"After the close, local Cheyenne management started opening up the doors" to Black Hills Corporation, "and that's when we found the stacks of uncompleted meter orders," Wevik said.²⁹ There were around 1,900 of them. It turned out that when customers came in and requested changes to their service during much of 2004, rather than actually implementing them in the billing system, the staff at Cheyenne Light had simply let work orders pile up in the basement.³⁰ Some residents, Wevik remembered, continued to receive bills for months after moving out of apartments and homes in the summer and fall. Others were drastically underbilled; "If you built a house in July of that year [2004], you got free electricity for the next seven months because you weren't set up in the system."³¹ It was a terrible, costly mess.

Customers were understandably upset, and their complaints prompted WPSC to issue a stern request for an explanation. It was a delicate situation. After a decade without filing for any new rate increases, Black Hills Corporation was in the middle of preparing a request for the Wyoming commission. Kyle White traveled to Cheyenne, where he explained the issues and mapped out Black Hills Corporation's commitment to resolving them. As part of the company's plan, two other Black Hills Corporation employees, Randy Harris and Barbara Zar, personally interviewed as many of Cheyenne Light's customer service representatives as they could to discern what had gone wrong.³²

Harris and Zar found that the transition to Xcel's new system had overwhelmed the customer service team and led to the creation of a huge backlog of service orders. To solve the problem, Black Hills Corporation organized an all-out effort. It temporarily shuttered its Black Hills Power offices in Edgemont and Newell, South Dakota. Dozens of customer

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spent months fixing the problems.³³

Meanwhile, Wyoming regulators could see that Black Hills Corporation needed extra funds to repair a problem it owned but had not created. They approved the rate increase after only two months of deliberation — light speed as far as regulatory filings were concerned. For White, this illustrated exactly why Black Hills Corporation had spent so many years focusing on its relationships with customers and regulators.³⁴

To demonstrate its commitment to resolving Chevenne Light's problems — some of which took a full year to rectify — Black Hills Corporation recommended that Wyoming regulators create a new customer service advisory group.³⁵ As the months ticked by, this entity monitored and acknowledged the company's progress.

While the Cheyenne Light integration was underway, Black Hills Corporation broke ground on the \$169 million Wygen Il plant, which would dedicate all of its 90 MW of power to Cheyenne Light's customers.³⁶ Like its predecessor, the plant would meet the highest environmental standards and was one of the first coal-fired power plants in the nation that was required to scrub its mercury emissions.³⁷

Overall, the Cheyenne Light, Fuel & Power deal illustrated the opportunities that accompanied the acquisition of challenged utilities. Black Hills Corporation could increase shareholder value while improving customer service and open up new opportunities for power generation. The experience also illustrated what the company had long believed: that delivering on promises and providing good customer service built brand equity that paid major dividends with customers, shareholders, and regulators when trust was most needed.

In early 2005, Emery reported to shareholders that FiberCom's financial performance had improved 33 percent in 2004 compared to 2003.³⁸

Even as Emery, Linn Evans, and other executives celebrated these improvements, they continued to shop for partners to expand FiberCom's scope and scale. He also met with executives at PrairieWave Communications in Sioux Falls and discussed opportunities for collaboration. Later, engineers and operations supervisors explored a joint marketing

service-focused staff from these and other offices temporarily relocated to Cheyenne and



Black Hills Corporation understood that providing reliable customer service and reliable energy went handin-hand. Immediately following the Chevenne Light acquisition, Black Hills Corporation proved its commitment to this value as it reconciled a deeply backlogged customer billing system in Cheyenne.

Dialing for a New Future

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strategy or even the possibility of launching a third, collaborative business. At one point, PrairieWave suggested that FiberCom should acquire their company.

"We looked at it," said Evans, "but decided that we didn't think our shareholders would want us to expand in a business where we were already losing money."

PrairieWave, Evans continued, was "disappointed when we gave them the news. When we told them we thought their asking price was too high, we joked, 'Maybe you ought to think about buying us for that kind of price." As Evans noted later, "It was

a flippant comment." The company was "not looking to sell" at that time, mostly because Emery and other executives wanted to avoid selling FiberCom at a substantial loss. "Our best option to recoup our investment," Emery said, "was to integrate FiberCom with Black Hills Power as much as possible and then continue operating the company."

Two months later, however, PrairieWave called with some surprising news: they had evaluated FiberCom and decided

to make an offer. "When we saw the number," said Evans, "and considered our strategic vision, we thought we owed it to our shareholders" to consider the deal.³⁹

Emery quietly pondered the offer. He did not want FiberCom's employees to think the company was on the auction block if the deal failed.⁴⁰ The deal did not fall through, and on April 20, 2005, the two companies announced that PrairieWave would buy FiberCom for \$103 million — roughly equal to its book value.

Black Hills Corporation learned, or perhaps re-learned, lessons from the FiberCom experience. First, it was important to carefully evaluate the capabilities of potential partners before going into business together. It was also important to consider how internal knowledge and skills could be applied in a separate, and fundamentally different, industry. For example, the challenges and costs of laying cable across the rough Black Hills landscape should have been something Black Hills Corporation understood. And what seemed like obvious synergies in providing a utility-like service to a familiar customer base did not materialize as expected.

Yet in business, as in life, timing mattered. In 1998, the world was enthralled with seemingly endless opportunities in the internet and telecom businesses, and Black Hills



Wygen II under construction in 2006. A 90 MW, coal-fired, base load power plant, Wygen II would serve Chevenne Light customers. Equipped with mercury scrubbing technology, the plant was intended to be among the cleanest conventional coal-fired plants in the nation.

Corporation was not the only one enticed into this bubble. In fact, Black Hills Corporation averted disaster in telecommunications, while many other companies collapsed during this tumultuous period.

The Fracking Revolution

While it trimmed underperforming, non-core businesses, Black Hills Corporation renewed its commitment to power generation and cautiously invested in new ventures when good opportunities presented themselves. Natural gas was one example. In the first few years of the 2000s, the combination of two decades-old technologies — horizontal drilling and hydraulic fracturing (or "fracking") — had opened vast reserves of oil and gas from hard shale deep within the earth. By drilling horizontal wells and blasting them with a pressurized mixture of water, chemicals, and sand, engineers freed up oil and gas reserves across the nation.⁴¹ Fracking revolutionized natural gas production, which increased sharply from about 2006 onward.⁴² Proponents predicted a lasting boom that would provide thousands of high-wage, blue collar jobs in rural states and cheap energy for the world.⁴³

When the gas boom started, Black Hills Corporation already had a handful of oil and gas assets, including wells in the San Juan Basin, which stretched from northwestern New Mexico into southwestern Colorado; the Powder River and Bighorn Basins in Wyoming; and the Denver-Julesberg Basin that runs into western Nebraska. The company also held interests in oil and gas properties in California, Louisiana, Montana, North Dakota, Oklahoma, and Texas, as well as 44.7 percent ownership in a gas-processing and gathering system outside Newcastle, Wyoming.44

Black Hills Corporation saw great potential in natural gas. As corporate planners noted, its "attractive features as an available, abundant fossil fuel" were matched by the fact that it had "up to 50 percent fewer greenhouse gas emissions than other fossil fuels, 80 percent less [nitrous oxide], and virtually no emissions of particulate matter." Best of all, gas was very efficient and "retain[ed] about 90 percent of its energy value when burned."45

In March 2006, the company announced a \$24.1 million expansion into the Piceance Basin in western Colorado. By the end of August, Black Hills had obtained 63 wells on 31,000 gross and 18,000 net acres of land formerly belonging to the Koch Exploration Company. The property held some 40 billion cubic feet of proven gas reserves.⁴⁶ When the deal was complete, Black Hills Corporation owned a total of 625 gross and 571 net operating wells across a half-dozen states and non-operating interests in properties containing 511 gross and 71 net wells. All told, 83 percent of the company's reserves were comprised of natural gas; the remainder contained oil.⁴⁷ These valuable assets enhanced Black Hills Corporation's balance sheet and created an ability to deliver fuel to new power plants it might build. With a larger presence in natural gas production and new experience in distribution through its recently acquired Cheyenne Light subsidiary, Black Hills Corporation also had deeper insights into a rapidly expanding industry with tremendous potential.


Lemuel K. Green was tight with his money, but would take a chance on a promising opportunity. As a young man living in Osbourne County, Kansas, where his family homesteaded in 1877, Green got into the flour milling business before experimenting with electric power. As he grew successful, Green wired his home and installed electric lights, an early electric washing machine, and even an electric-powered dishwasher. Although the latter never quite worked, Green remained convinced of the enormous potential of electric power. Upon selling his mills in 1908, Green purchased the Concordia Electric Light Company for a steep \$21,500 — or about \$550,000 in 2018.¹⁴

Concordia owned a hydroelectric plant on the Republican River and powered a gristmill and homes in Osborne. Green soon installed transmission lines to serve several nearby towns. He lobbied locals for bond approvals to finance and build new transmission lines across Concordia's service areas. Green's construction crew often included his sons, Ralph and Lawrence, who became an integral part of the family business. By 1917, they were doing business as the Green Light & Power Company, and within a short while, were serving 22 communities across northern Kansas.¹⁵

As the Green Power & Light Company grew in the 1920s, it realized that customer demand had begun to outstrip the capacity of regional banks — even large ones in Kansas City — to finance the construction of expensive generating stations. So, in 1922, the Greens took their company public and rebranded it as the West Missouri Power Company. The company experienced dramatic growth, building new generation throughout western Missouri. Beginning in 1927, the West Missouri Power Company underwent a series of sales and mergers that left Insull Utilities of Chicago in control. Over the next few years, Insull consolidated the former Green family network with several other regional gas and electric companies, uniting them under the banner of the Missouri Public Service Company (MPSC).

Like all utilities, MPSC faced enormous challenges in the 20th century, including regulatory, labor, and customer relations problems in the 1930s. In the 1940s, Ralph Green regained a controlling interest in the company, and members of the Green family would lead MPSC for decades. During this period, MPSC met the energy demands of Kansas City's rapidly growing residential and industrials sectors.¹⁶ MPSC endured the economic slump of the 1970s, staging a strong rebound when several major companies built headquarters and factories in Kansas City in the early 1980s.¹⁷

To better reflect its service to these national and global corporations, MPSC rebranded as UtiliCorp United, Inc. in 1985.¹⁸ The company began diversifying, quickly acquiring natural gas and electric systems in Minnesota, West Virginia, and other states, as well as in British Columbia. The company also embraced deregulation and the much riskier non-regulated energy trading and gas storage and transmission industries, using these robust revenue streams to build a global empire that reached into European markets, Australia, and New Zealand by the end of the 1990s. Looking forward to a future of soaring success, UtiliCorp changed its name



to Aquila, Inc., or "eagle" in Latin, in 2002.¹⁹

Unfortunately, Aquila's success depended on a high-risk, non-utility growth strategy that relied heavily on debt. This left the company vulnerable in the fallout from the California Energy Crisis and the Enron scandal, which imperiled energy In addition to swapping out the decals on its vehicle fleet, Black Hills Corporation had to revamp seven major administrative systems as it acquired the much larger Aquila in 2008.

and the Enron scandal, which imperiled energy marketing firms everywhere. Several of Aquila's peer companies failed in 2002. Meanwhile, Aquila worried that it would not be able to sustain its debt payments beyond the first half of 2003.²⁰ Scrambling to stay afloat and under pressure from credit rating agencies, Wall Street analysts, and investors, Aquila's CEO Robert Green and his brother, Chairman of the Board Richard Green, ordered major cost reductions.²¹ Despite these efforts, Moody's downgraded the company's debts to below investment-grade in early September.²²

Aquila's share prices and credit ratings fell throughout 2002, and the company faced a cash crisis over the next several years. It sold assets and issued stock to raise capital and underwent major debt refinancing as it struggled for survival. Aquila remained in this challenging position for several years, until corporate leaders decided to search for a buyer. After the Missouri electric utility was merged with Great Plains Energy, a Kansas City-based utility company, and Black Hills Corporation acquired various Aquila natural gas and electric utilities, the Green family would end its nearly 100-year association with the company that L.K. Green had built.²³

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"A MINNOW SWALLOWING A WHALE"

Small energy companies organized, reorganized, combined, and consolidated over the course of many decades to make Black Hills Corporation. Broad regulatory and market forces shaped each of these transitions and brought new challenges and opportunities. With the collapse of Enron and the deregulatory movement, Kansas City-based Aquila was struggling. Black Hills Corporation recognized an extraordinary opportunity to grow by acquiring a significant portion of Aquila's natural gas businesses. Integrating these companies would not be easy, but, if done well, it would set the stage for a new era of expansion.

"The way we approach business, and the way we do things in a fairly careful, calculated way, makes good long-term sense. And as we look to the future, we want to continue to do that because we want to make moves that afford us not just the opportunity of the day, but opportunities down the road."

DAVID EMERY, CHAIRMAN AND CEO

CHAPTER ELEVEN

The successful integration of Cheyenne Light, Fuel & Power despite difficult circumstances gave Black Hills Corporation confidence that it could grow through acquisitions. Capitalizing on this momentum, the company proposed a strategic merger with Northwestern Corporation, which had filed for bankruptcy in November 2005 after being financially crippled by diversification efforts gone awry. Northwestern's creditors, however, did not want to slow down the proceedings with a utility merger. After Northwestern emerged from bankruptcy, Black Hills Corporation offered a confidential purchase proposal, which Northwestern, unfortunately, revealed to the public after the stock markets closed on the Wednesday before Thanksgiving.¹

Black Hills Corporation soon found itself in the middle of a bidding war. The company's final offer would have given Northwestern shareholders BKH stock at between \$33 and \$35 per share.² When other bidders went higher, Black Hills Corporation decided to let the deal go. The entire episode was all for naught; the Montana Public Service Commission blocked the Northwestern sale altogether. Relationships established over the course of these negotiations, however, would prove profitable a few years later.

Waves of consolidation in the utility sector swept over the country in the wake of deregulation. In February 2006, for example, MidAmerican Energy Holdings Company acquired PacifiCorp. Duke Energy and Cinergy became Duke Energy Corporation that April, and in October, the Federal Energy Regulatory Commission (FERC) approved merger plans for National Grid and KeySpan Corporation. By 2012, some analysts predicted, the number of companies in the American utility industry would be cut in half.³

Following the collapse of the Northwestern deal, Black Hills Corporation continued its search for utility properties. During that time, Dave Emery and Mark Thies headed to New York for investor meetings. While there, they got a call from Credit Suisse, the investment banking firm that had managed the Northwestern sale. "They wanted to have dinner with us," Emery recalled.

Over the course of the evening, the bankers revealed that they had an interesting deal in mind. A major client was interested in acquiring a utility company with significant electric and natural gas assets. The bankers would not name the entity, but explained that their client only wanted part of the utility's operations. The client needed a home for the remaining assets, which were largely natural gas utility properties, if their acquisition was to succeed.

Credit Suisse had evaluated Black Hills Corporation's strategy, structure, and operations during the bidding war for Northwestern. They were confident that Black Hills Corporation had the talent, expertise, and relationships with regulators to complete the multi-party deal. They asked if Black Hills was interested. At the end of dinner, Emery said, "We'll think about it."

At the time, Emery did not know that the bankers were talking about Aquila, a Kansas City-based utility company that specialized in distributing electricity and natural gas.

A TALENT FOR BUILDING POWER PLANTS



A growing population in Albuquerque created a rising demand for electricity. In April 2007, Black Hills Generation reached an agreement with Public Service Company of New Mexico to build and operate a 149 MW, gas turbine power plant. The agreement for the Valencia Power Plant included a 20-year power purchase clause. Public Service Company of New Mexico would also be responsible for providing the fuel for the plant's operations. With a budget of just over \$100 million and an in-service target date of June 1, 2008, engineering and construction began immediately. On May 30, 2008, the plant began commercial service. The project was on time and under budget. "Our power generation and corporate development teams did an outstanding job," noted Dave Emery. Aquila had struggled for survival after Enron's collapse. During the California energy crisis, the company made a lot of money selling energy into the Golden State, and after Enron's downfall, some people at Aquila thought they might get good deals on some of Enron's assets. But as news of the Enron scandal spread, credit rating agencies grew skeptical of energy merchants like Aquila. Over the course of 2002, the company's credit ratings and share price fell. This triggered accelerated repayment on nearly \$150 million in debt in late September, funded largely through the sale of international, non-core, non-utility assets. Over the next few years, Aquila would sell its assets in England, Australia, and Canada and then shutter its merchant energy and trading function in North America.⁴

In a cash crisis, Aquila announced that Robert Green, who had led the company through a period of rapid growth and served as CEO for less than a year, would resign. Green's older brother, Richard, the chairman of the company and its former CEO, would resume that position.⁵ The elder Green promised to return to the company's roots and refocus on its traditional utility businesses. Despite his efforts, Aquila struggled, reporting a 44 percent decline in revenues and a "hefty" loss in the fourth quarter of 2003.⁶ To meet its cash needs, the company sold assets, completed a major refinancing, and issued new common stock to strengthen its balance sheet throughout 2004.⁷

As the company faced mounting challenges, senior managers at Aquila, like Ivan Vancas, were told to develop plans to reduce costs. Asked to lead Aquila's natural gas operations in Iowa and Missouri, Vancas was dispatched to Aquila's Kansas City headquarters. He remembered meeting with senior management to evaluate the company's financial position. "One of those meetings was with the CFO," he recalled, " who said 'You know, it's very likely that we're going to have to sell the entire company."⁸

Aquila had kept a tight lid on the possibility of a total sale or merger, but in September 2005, it floated its interest in entertaining offers on its gas utilities in Missouri, Michigan, and Minnesota as well as its electric utilities in Colorado and Kansas. Interested in the Colorado and Kansas electric utilities, Black Hills Corporation submitted a bid, but it was not successful.

"It looked a lot like Cheyenne Light, Fuel & Power," Dave Emery said, "and there were opportunities down the road to build and operate generating plants." Aquila subsequently sold four of the five utilities, but decided to hold onto the Colorado electric company.

Between September 2005 and February 2006, Aquila continued to evaluate its strategic options, including a possible sale or merger of the whole company. Blackstone and Lehman Brothers were hired as financial advisors, and in May, they provided Aquila's board of directors with the names of nine companies with the resources and experience to run Aquila's businesses. The advisors suggested that some of these companies might only be interested in part of Aquila's assets. The sale might need to be done in two steps. Publicly, Aquila did not acknowledge the fact that it was considering a sale. Discussions occurred by invitation only. On May 19, Aquila's CEO Richard Green met with Michael

Chesser, chairman and CEO of Great Plains Energy, to talk about a deal. Great Plains, Chesser confirmed, was interested. Shortly afterwards, it joined five other entities that had expressed a serious interest in buying all or parts of Aquila.

To put a deal together, Great Plains Energy reached out to Black Hills Corporation. Early in the summer of 2006, Emery, Thies, and Maurice Klefeker, senior vice president of Strategic Planning and Development, flew to Missouri. Meeting at the historic Kansas City Club in the heart of downtown and just a short distance from Aquila's headquarters, the Great Plains and Black Hills A "Your Vote Counts" packet was sent to all Aquila shareholders. Aquila Corporation teams wanted to get to know each other, so actively encouraged investors to they talked without lawyers or bankers. Before the meeting approve the three-way transaction was over, the group made plans to collaborate on a deal. with Great Plains Energy and Black Teams from both companies soon began due diligence, ana-Hills Corporation. lyzing Aquila's strengths and weaknesses. Following a board of directors meeting in Colorado in July 2006, Black Hills Corporation and Great Plains Energy jointly submitted a formal indication of interest.

Over the next several months, Aquila and its investment bankers checked the financial condition of the potential bidders. They invited Black Hills Corporation and Great Plains into detailed management presentations and due diligence meetings. Finally, in late December, Aquila's board gave Black Hills Corporation and Great Plains Energy a 30-day exclusive right to negotiate a deal.

"It was a real interesting holiday period," Emery remembered, and "it wrecked everyone's Christmas." Long hours continued into the new year as the three entities worked towards an equitable deal, which they planned to announce in early February.

On February 4, Emery was just settling in to watch Adam Vinatieri — the kicker for the Indianapolis Colts who grew up in Rapid City — square off against the Chicago Bears in Super Bowl XLI when a worrisome call came in. A representative from Standard & Poor's had informed Black Hills Corporation that "they would downgrade our credit to junk," Emery remembered, "if we didn't issue \$150 million in stock immediately following the deal announcement. They told us that three days before we signed the deal. We had to scramble. We had three calls with the board on Super Bowl Sunday trying to get approvals to go issue equity the day after the announcement."⁹

Fortunately, the board approved the equity issuance. Emery flew to Kansas City, and on



February 7, Black Hills Corporation, Great Plains Energy, and Aquila announced a sound but complicated — agreement. Black Hills Corporation would spend \$940 million in cash to purchase Aquila's one regulated electric utility in Colorado along with four regulated gas utilities in Colorado, Kansas, Nebraska, and Iowa. Great Plains would acquire the outstanding shares and the remaining assets of Aquila, including its electric utility business in Missouri in a stock-for-stock merger.

The following week was a wild ride for Emery and many Black Hills Corporation employees as the company worked to find investors willing to purchase \$150 million in new shares. From Kansas City, Emery flew straight to New York City. CFO Mark Theis and Dale Jahr, the head of Investor Relations, were supposed to meet him there, but bad winter weather stranded them in South Dakota. For three days, Emery made the rounds on Wall Street on his own, presenting the company's story to investors in dozens of meetings. Ultimately, Black Hills Corporation completed the sale of 4.17 million shares of common stock at \$36 a share to buoy the company's credit ratings through the Aquila transaction.¹⁰

Altogether, the Aquila deal would transform Black Hills Corporation, adding approximately 616,000 utility customers to the company's base, including 523,000 natural gas customers.¹¹ After 125 years in the power business, when the integration was complete, gas customers would, for the first time, account for the majority of the company's retail business.12 Before that could happen, however, Black Hills Corporation, Great Plains, and Aquila had to convince shareholders of the transaction's value while persuading various state and federal regulators that the deal was in customers' best interests.

Winning the Approvals for Aquila

The three-party Aquila deal was a sprawling, multi-state endeavor that required Black Hills Corporation, Great Plains Energy, and Aquila to cross a series of significant legal and regulatory hurdles. Approvals had to come from FERC and regulators in five states: Missouri, Iowa, Nebraska, Colorado, and Kansas, all of whom were set on ensuring that the new ownership structure would benefit consumers in their state. Federal antitrust officials had to confirm that it would not undermine competition. Shareholders at Aquila and Great Plains needed to see that it was in their best interest. Meanwhile, Black Hills Corporation had to raise enough money to finance the nearly \$1 billion acquisition.

The financial aspects of the deal came together fairly smoothly. In addition to placing the \$150 million in stock in February, Black Hills Corporation announced a \$1 billion bridge financing through ABN AMRO Bank.¹³ Getting shareholder approvals also moved relatively quickly. Shareholders from Great Plains and Aquila (approval was not required from Black Hills Corporation's shareholders) overwhelmingly approved the transaction in October 2007.14 Meanwhile, regulators evaluated the Aquila deal.15

Black Hills Corporation, Great Plains, and Aquila sought approvals from various state and federal regulators in the spring of 2007. The Iowa Utilities Board gave its blessing in

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September, followed by Nebraska and FERC in October.¹⁶ In Colorado and Kansas, hearings were more protracted, with various constituencies lobbying for concessions as a condition for approval. Finally, by the end of February 2008 just over a year after the deal was announced — Black Hills Corporation had obtained all of the necessary approvals.¹⁷

Yet the deal could not close yet. Great Plains still needed the approval of the Public Service Commission in Missouri, where Aquila traced its roots back a century. While Great Plains debated with consumer advocates in Missouri in early 2008, Black Hills Corporation had a chance to reevaluate its entire strategy.

IPP Divestiture

Since 1999, Black Hills Corporation's investments in gas-fired independent power plants (IPPs) had provided important opportunities to enter new markets. But these IPPs were especially vulnerable to market volatility. In the fall of 2007, Black Hills Corporation began to consider selling some of them and using the proceeds to complete the Aquila transaction.

The Arapahoe Power Plant in Colorado was one of seven gas-fired independent power plants sold for \$840 million in 2008. Proceeds from the sale reduced Black Hills Corporation's need to sell stock or borrow to finance the Aquila acquisition.



In October 2007, Black Hills Corporation announced that Credit Suisse would oversee an auction of a portion of the company's gas-fired power plants. With Montana-Dakota Utilities having recently sold several IPPs for nearly \$600 million, Emery told analysts that he believed Black Hills Corporation would secure a good price.¹⁸ Black Hills Corporation then decided to add one or two additional plants because the bankers believed that offering even more could attract a larger buyer.¹⁹

A crowd of Black Hills Corporation employees and well-wishers helped the company celebrate the closing of the Aquila deal on July 14, 2008. On hand for the festivities were. from foreground left, South Dakota Lieutenant Governor Dennis Daugaard, **CEO Dave Emery, and Rapid City** Mayor Alan Hanks.

The strategy worked. On the last day of April 2008, the company announced it had reached an agreement with affiliates of the Hastings Funds Management group and IIF BH Investment, LLC to sell seven gas-fired power plants for \$840 million.²⁰ The deal included the Fountain Valley Plant in Colorado (240 MW), Las Vegas II (224 MW), Valencia (149 MW), Arapahoe (130 MW), Harbor Cogeneration (98 MW), Valmont (80 MW), and Las Vegas I (53 MW).²¹ This sale enhanced Black Hills Corporation's balance sheet considerably.

In Missouri, however, Great Plains was still negotiating with regulators, and hearings continued for months over peripheral issues like the construction program for its subsidiary, Kansas City Power & Light. Finally, on July 1, the Missouri Public Service Commission agreed to the transaction.

With the approvals for the Aquila deal in hand, Black Hills Corporation closed the sale of the independent power plants on Friday, July 11. Careful tax planning allowed the company to apply the proceeds from those sales to the Aquila transaction and defer between \$130 and \$165 million in income taxes that would have been due on the gain from the

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sale of the plants. That Friday, Dave Emery flew to Kansas City to sign the closing documents, while employees at Black Hills Corporation went into high gear in preparation for Monday's closing.

According to Linn Evans, even if you included the number of customers that Black Hills Corporation had just before the FiberCom sale in 2005, Aquila was "five times bigger than us in about every calculation," including customers. The deal more than doubled the company's workforce. Integrating systems for managing customers, employees, and services at this new scale posed a major challenge and was unlike anything the company had tried to do before.²² Fortunately, the experience with Cheyenne Light gave employees confidence that they could get the job done.

Through the fall of 2007 and into 2008, many employees had to continue their day-to-day jobs – developing energy resources, producing power, and serving customers – while laying plans for the integration of 1,250 Aquila legacy employees. At the same time, they worked on long-term systems integration even as they got to know new customers, employees, and regulators across several new states.²³

With the integration, there were changes to senior management. From Aquila, Black Hills Corporation recruited Scott Buchholz to serve as senior vice president and chief information officer as well as Lynn Wilson as senior vice president of Communications and Investor Relations. Meanwhile, Anthony Cleberg became executive vice president and CFO, while Jeff Berzina was tapped to head the Finance Department and Richard Kinzley took over Strategic Planning and Development. Then, in early 2009, Bob Myers assumed leadership of Human Resources.²⁴

With these changes underway, corporate leaders focused on cultural integration and the development of new branding strategies that could unite the companies in the eyes of an expanded customer base. The company set up a new call center in Rapid City, which added over 70 new staff members in only a few months. Senior leadership also worked closely with Aquila to map out the integration and define areas where the workforce would need to be adjusted.

Due to the unique, three-part structure of the Aquila deal, the acquisition was straightforward for Black Hills Corporation, at least from a workforce planning point of view. "We didn't have to deal with questions like 'What happens to the headquarters building or all the support employees, lawyers, accountants, engineers?," Emery said, because those assets were going to Great Plains. Instead, Black Hills Corporation could develop its corporate and general functions "person by person, department by department," to obtain an adequate, post-integration workforce.²⁵ Throughout the process, leaders from Black Hills met with Aquila employees to learn about their work culture, understand their concerns, and communicate directly and honestly about the future. "We literally could

Seven Systems At Once



offer them jobs before the deal closed, so they knew if they were going to have one or not," Emery said. In addition, the company "could have detailed discussions with field-level managers and supervisors about how best to run the business going forward." For those Aquila employees who would not be joining Black Hills, the company could at least ease the anxiety of the unknown by explaining the severance process and providing incentives to stay on board through the integration.²⁶

As computer technology improved in the early 2000s, technicians relied on a series of flat screen monitors to oversee power generation at the Wygen complex near Gillette, Wyoming.

lvan Vancas' experience reflected the mixture of excitement and tumult that affected many Aquila employees. Before the sale was announced, he said, an almost daily flow of bad press about Aquila's struggles appeared in the Kansas City newspapers, undermining morale. As news of the acquisition came in, employees worried about what it would mean for them and their families. Fortunately, Aquila's leadership cooperated with Great Plains and Black Hills Corporation to marshal people through the transition.²⁷

Meeting with senior leadership and employees on all sides of the deal quickly assuaged Vancas' concerns. Still a member of the Aquila team and dealing mostly with the Great Plains side of the deal, he recalled hearing accolades about Black Hills Corporation's

CRYSTALLIZING THE MISSION, VISION, AND VALUES



During the Aquila acquisition in 2008 and in anticipation of the approaching employee integration, Black Hills Corporation sought to define the bedrock values that informed the company's commitments to customers and shareholders throughout its history. Realizing the important role these principles would play in guiding its future, the leadership team developed vision, mission and values statements. This process produced a vision statement: "Be the Energy Partner of Choice," as well as a mission statement: "Improving Life with Energy." Meanwhile, eight values statements described the elements of Black Hills Corporation's strategy that would help it achieve its goals. They were: "Agility," "Communication," "Creating Value," "Customer Service," "Integrity,"

In 2013, corporate leaders recognized the need to focus on ensuring that Black Hills Corporation's employees lived and worked safely every day. Accordingly, the company added "Safety" as its ninth value. Together, these values helped to unify Black Hills Corporation's employees and put them on a path to living the company's vision and fulfilling its mission.

honest and transparent approach to the transition. Vancas attended a meeting hosted by Emery and Evans at an Aquila office in Raytown, Missouri. Addressing a group of employees, the pair "started the meeting with a safety message, and that was the first time I had ever heard senior executives talk about employee safety," Vancas said. "It indicated to me that they were grounded in the fundamentals, making sure that everyone was working safely and was at work every day, and that was the key to their success."²⁸

Meanwhile, the company began planning to integrate operating systems. Recalling the near-disaster at Cheyenne Light, systems personnel carefully mapped out line and staff responsibilities. From Human Resources, Bob Myers often told people, "We're the minnow and we just swallowed a whale. Now we've got to figure out how to digest it."²⁹ This effort took considerable creativity, requiring Black Hills to adapt to its new entities. Early on, for example, the systems team recognized that Black Hills Corporation would need to migrate much of its software and systems over to Aquila's, rather than the other way around. They predicted this process would take 12 to 18 months from the time of the completion of the deal.³⁰

The full integration was finally completed at the end of 2010.³¹ As the second year of the process approached, the term "unification" replaced "integration" to signify the ongoing work of combining two large workforces with different corporate and regional cultures. This work, the company understood, would continue well after the email systems and offices had been synced up and staffed.³²

Although the Aquila acquisition had an unprecedented impact on every subsidiary and service company department, separate segments experienced different levels of disruption.³³ Vancas, for example, had a background in operations and joined the newly created Black Hills Energy — Black Hills Corporation's new name for the Colorado, Iowa, Kansas, and Nebraska-based utilities that had belonged to Aquila. From his vantage point, the acquisition went smoothly: experienced and qualified people moved into new roles generally without problems.³⁴

The Human Resources staff, however, labored intensely to keep up with the pace and scale of the integration and unification. According to Jennifer Landis, senior vice president and chief human resources officer, the deal "broke HR. I mean it really broke HR." As she explained, "We had paper-based HR systems. Aquila had computer-based HR systems, and we had way too many employees now to be able to sustain anything that was on paper."³⁵

Altogether, Black Hills Corporation had to revamp seven vital systems at once. They included the company's customer information system; the company's financial and human resources management systems; the Supervisory Control and Data Acquisition, or "SCADA," programs; the utility project resource management platform; and the geographic information systems software.³⁶ While all of this was underway, Black Hills Corporation took another step reminiscent of the Cheyenne Light acquisition four years

EXPANDING THE ENERGY HORIZON

earlier: it formed the Black Hills Utilities Holding Company, which provided support services like those supplied by the Black Hills Service Company, but exclusively for the utilities segment.³⁷

This frenzy of activity continued through the formal merging of Aquila and Black Hills Corporation in July 2008. Employees from both companies toiled around the clock in the days leading up to the big event. Network specialists prepared for the systems integration, while staff from Corporate Communications finalized press releases and employee information packets to announce staffing changes and prepare for the celebration.³⁸

Finally, at 12:01 a.m. Mountain Daylight Time (MDT) on July 14, the two companies made the cutover and Black Hills Corporation assumed the controls for both systems. That morning, the legal team double-checked cash transfers and document filings. The final paperwork went to Delaware, where Aquila was incorporated, and at 10:00 a.m. MDT, when the transfer was complete, Aquila ceased to exist as an active corporation. Coming one business day after the completion of the IPP transaction, Black Hills had officially completed the two biggest deals in its history on consecutive business days.

A celebration followed over the lunch hour, with employees, family, retirees, and community leaders on hand in the lobby of the company's headquarters in downtown Rapid City. Dave Emery could not hide his excitement. He congratulated the employees for their efforts and unveiled a painting by Nebraska artist Jim Whartman which featured an eagle (the meaning of *aquila* in Latin) soaring over the Needles formation in the Black Hills. Then, with the lieutenant governor of South Dakota, the mayor of Rapid City, and a crowd around him, Emery counted down to I p.m. for a "One @ One" celebration. "At this moment," Emery announced, "we are one company."

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"The Great Recession largely settled a lot of utilities down in terms of growth, and it refocused a lot of companies like ours. We weren't doing it because everyone else was doing it. We had already decided to do it as early as 2004, but I think the recession really caused a lot of other utilities to become much more utilityfocused and avoid nonregulated businesses."

LINN EVANS, PRESIDENT AND COO



As the first glimmers of economic recovery began to show, Black Hills Corporation cautiously monitored its costs, revenues, and long-term prospects — all as its newly expanded workforce completed the integration from the Aquila acquisition. As the world faced a slow and arduous climb from the depths of the Great Recession, Black Hills Corporation struggled to cope with the credit crunch that followed, continued to evolve to meet the demands of the day, and remained focused on the utilities strategy it had adopted in the wake of deregulation.

CHAPTER TWELVE

CHAPTER TWELVE - NAVIGATING A NEW WORLD

T ithin a few months of closing the Aquila transaction, Black Hills Corporation found that the challenges it was about to face were larger than anyone had predicted. Nearly eight years earlier, a U.S. Bureau of Labor Statistics report had projected good things for the first decade of the 21st century. The GDP of the United States, it claimed, would grow at 3.4 percent — faster, even, than the prosperous 1990s —even if growth in household employment slowed slightly. Meanwhile, the report also promised that the national unemployment rate



would continue to hover at around 4 percent.¹ For four years after the stock market drop of 2002, the nation's economy had roared back, fueled by surging growth in residential real estate. U.S. home prices peaked in the summer of 2006, and the stock market reached a historic high one autumn day in 2007, when the Dow Jones Industrial

As the housing crisis spread, banks foreclosed on homes across the United States. Within months, the housing crisis threw the economy into a tailspin.

Average closed at 14,286.² For a handful of people who were watching closely, however, there were ominous signs.

Late in 2006, the number of foreclosures on both subprime and prime mortgages began to climb sharply.³ Sensing these trends in early 2007, the Federal Home Loan Mortgage Corporation, or "Freddie Mac," attempted to correct course but to no avail. Over the next 18 months, several major lenders filed for bankruptcy or dumped risky investments. The U.S. economy went into recession in December 2007, and the housing bubble burst in September 2008, contaminating financial markets and sending the global economy into a dangerous spiral.4

As news of the crisis spread, consumer and investor confidence collapsed. Commentators on all sides sought explanations. Some pointed at irresponsible borrowers who bought more house than they could afford. Others blamed the banks and mortgage companies who had placed too much trust in the work of quantitative analysts who promised to hedge every risk. Loose federal monetary policies, others insisted, had fueled the inflation of home prices while lending programs for low-income Americans opened the door to catastrophe. Each of these forces likely contributed to the storm.5

The "Great Recession" made landfall directly in the middle of an intense presidential election. By the end of the summer in 2008, the candidates to replace outgoing President George W. Bush were two U.S. senators: Arizona Republican John McCain and Barack Obama, a Democrat from Illinois. In September, as the crisis deepened, the U.S. government assumed temporary ownership of Freddie Mac and the Federal National Mortgage Association, or "Fannie Mae." The next month, Congress created the Troubled Asset Relief Program, which allotted some \$700 billion to "bail out" banks deemed "too big to fail."

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Obama defeated McCain on November 4, and just over a month later, the Federal Reserve dropped interest rates to almost zero to incentivize new loans and spending. Then, less than a month after Obama's inauguration, Congress passed the American Recovery and Reinvestment Act, known as "the Stimulus," which allotted another \$787 billion to jumpstart the economy.⁶

Although utility companies tended to ride out economic downturns with relative stability, the Great Recession was different. Things went south across the industry in the second half of 2008, months after Black Hills Corporation completed the Aquila acquisition. In July, energy commodity prices soared to historic highs. Natural gas was at \$13 per thousand cubic feet (MCF), while crude oil approached \$150 a barrel. Over the next six months, prices plunged to below \$6 per MCF and less than \$45 a barrel.⁷

Low energy prices meant lower-than-expected returns for Worldwide. Black Hills Exploration & Production (BHEP). Commodity prices stayed low through 2009, while "a disconnect between the value of crude oil and natural gas developed," pushing the price ratio between the two — which usually rested around 1:6 — to 1:15. Across the United States, demand for natural gas decreased. A glut of supply was exacerbated by high levels of gas storage during the fracking boom.⁸

When prices cratered in 2008, BHEP recorded a \$49.7 million loss. Fortunately for Black Hills Corporation, the drop in energy prices resulted in non-cash losses based on commodity devaluations, so the dip was more visible on the books than in the company's pocketbook.⁹ Along with the drop in natural gas and oil, the price of coal fell as well. Black Hills Corporation was protected from this drop by the fact that it used its own coal to fuel power production or sold it under long-term contracts that were insulated from this price decline.¹⁰

As a wave of foreclosures and business failures swept the nation in 2009, energy consumption dropped.¹¹ Demand declined as consumers tightened their belts and a mild winter diminished the need to turn up the thermostat.¹² For Black Hills Corporation, new customer growth in residential areas had been steady for four years, but crashed during the Great Recession.¹³ As industrial clients shut their doors, the company lost \$3.2 million in power sales.¹⁴



Graphs showing dramatic declines in stock prices and home values frequented newspaper cover pages and TV news tickers as the Great Recession took hold. Reprinted with permission of The Wall Street Journal, Copyright © 2008 Dow Jones & Company, Inc. All Rights Reserved

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Enserco also saw a \$69.3 million pre-tax decrease in realized marketing margins in 2008. Fortunately, this decrease — driven largely by weak commodity markets — was offset by some \$34.8 million in unrealized margins at the end of the year.¹⁵ But the business continued to struggle in 2009.¹⁶

In the energy industry, as elsewhere, an international credit crisis made it harder to find financing for expansion.¹⁷ Credit markets began to open in 2009 as the global economy showed its first signs of recovery, but company leaders knew they were not out of the woods. Corporate leaders also worried that cash flow concerns might necessitate a reduction in dividends for BKH stock, making it less attractive to investors and raising the costs the company would have to incur if it sought new equity.¹⁸

Circumstances forced Black Hills Corporation to complete the Aquila integration with the anxiety and uncertainty of the financial crisis pulling at its back, but Dave Emery and other corporate officers were also aware that the company had been very lucky. Referring to the IPP sale that helped finance the Aquila deal, he noted that "if we had been literally a few weeks later," the market downturn could have lowered the value of Black Hills Corporation's power plants, and "we would not have gotten the price we got," potentially disrupting the entire deal.¹⁹

The financial crisis also made it difficult for Black Hills Corporation to finalize the debt portion of the Aquila acquisition. With the stock market crash, long term debt was only available at high interest rates, so Black Hills Corporation's leadership team scrambled to secure financing and devise a plan that would, after several years of careful repayment, leave the overall cost of the Aquila deal close to its original, pre-recession projections.

The resolution to these challenges came through patience and crisis management. The tension of these months, however, would not soon be forgotten. Emery remembered how, on a trip to New York for investor meetings in early 2009, one portfolio manager was angry because Black Hills Corporation's stock price had slipped while the company was resolving its financial challenges. The manager stood up and started shouting at Emery and Tony Cleberg, the company's CFO, telling them that Black Hills Corporation had to secure debt immediately no matter the interest rates because investors were growing skittish that the company might default on the Aquila bridge loan. "We told them we were going to be patient," Emery remembered. "Hell, you don't have time to be patient!" the man responded. Then, Emery and Cleberg explained that the cost of the debt mattered to them, and that they had time to secure permanent financing at more reasonable interest rates, which they did. Although it ended well, Emery remembered the incident as "probably the only time I've had an investor stand up and yell at me."

For all its stress and calamity, the Great Recession also delivered some unexpected benefits to Black Hills Corporation. One involved talent acquisition during the Aquila integration. As Linn Evans put it, "We were hiring in the middle of a very deep recession, and we took advantage of that. We hired some extraordinary people who otherwise, in good times, may

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have said 'Rapid City? Where's that?!^{"20} In early 2010, Black Hills Corporation also received \$20.7 million in funds from a Department of Energy "smart grid" grant program funded by the federal government's economic stimulus program. The grant allowed Black Hills Power, Black Hills Energy-Colorado Electric, and Cheyenne Light, Fuel & Power to expand their advanced metering infrastructure (AMI) by updating and installing 150,000 new, high-tech meters across the three companies' service areas.²¹

The recession also eased the construction of a major new power plant. On January 1, 2008 — just as the Aquila acquisition was moving forward — Black Hills Corporation had completed its 90 MW, \$182 million Wygen II plant, which was to provide service to Cheyenne Light, Fuel & Power. One of the most environmentally advanced, coal-fired power plants in the country, Wygen II was built with mercury abatement equipment, and Black Hills Corporation saw itself as a pioneer in what many were calling the "clean coal" industry. Enthusiastic about the potential for this new technology, the company completed the permitting process and broke ground for an additional 100 MW, coal-fired plant — Wygen III — within months of completing Wygen II.²²

Scheduled for completion in 2010, Wygen III was expected to meet Black Hills Power's growing energy needs and burn another 600,000 tons of coal per year. Mark Lux, who had been vice president of Power Delivery at Black Hills Corporation since 2004, recalled the stark contrast between the construction of Wygen II and Wygen III. Competitive labor markets had been a hallmark of the pre-recession environment. "There was so much work going on across the country that we could not get a mechanical contractor to even bid" on Wygen II, he recalled. It was the only time in his 30-plus years on the job that the company had trouble finding a contractor for work on a power project. With Wygen III, circumstances had completely changed. The plant had been under construction for less than a year when the recession hit. Suddenly, contractors were willing to take any work they could get just to keep the doors open. These new circumstances made high-quality talent available at affordable rates, Lux said, and allowed the company "to execute on that project very successfully, ahead of budget and ahead of schedule."²³ The plant went online in April 2010.²⁴

New Regulatory Environments

For all the anxiety and turmoil that accompanied the Great Recession, the period between 2008 and 2010 showcased how Black Hills Corporation had emerged from the era of

A Black Hills Corporation technician upgrades a customer's meter in Pueblo, Colorado. In an effort to jumpstart the national economy following the Great Recession, the federal government subsidized "smart grid" and other infrastructure programs.

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deregulation with an expanded and better-defined set of competencies. As it entered new states and service territories, each with a political and regulatory culture of its own, the company relied on the values and reputation it had spent so many years cultivating in Wyoming and South Dakota. Change went smoothly in some states; others seemed like a long series of trials and tribulations.

The year 2009 changed the tenor of American politics in ways that resonated across the energy industry. Newly inaugurated President Barack

Obama pushed to reevaluate the nation's approach to fossil fuels and environmental regulation, and the administration spearheaded a variety of new initiatives. Among them was the American Clean Energy and Security Act (ACESA), which would have implemented a so-called "cap-and-trade"

program that aimed to reduce carbon emissions across the nation by limiting the amount of carbon individual companies could produce. Under the plan, companies that exceeded their emissions allocations could buy surplus carbon credits from companies that did not use all of theirs. The bill passed the House of Representatives in June 2009 and faced a likely Senate vote that fall.²⁵

As Black Hills Corporation evaluated the House bill in the spring and early summer of 2009, it concluded that the legislation would lead to an increase in rates that would be seriously detrimental to customers. Under the leadership of Jafar Karim and Barbara Zar in the Governmental Affairs division, Black Hills Corporation joined many others in the energy industry to lobby against the cap-and-trade bill. In communications with policy makers, the company explained that the proposed law pitted large, urban communities in coastal states against smaller, more rural, and largely coal-powered communities in the Midwest. As Black Hills Power's Vice President of Operations Chuck Loomis wrote to customers, companies like Black Hills Corporation "face[d] an ongoing challenge of balancing their customers' need for electricity with the need to protect the environment." Cap-and-trade and other provisions in the bill, he suggested, would increase electric and natural gas customers' utility bills substantially by raising production costs, which utilities and other industries would have to pass along to customers.²⁶

Dave Emery penned letters and met frequently with congressional representatives from across the company's service territories, asking them to view this as a regional, rather than partisan, issue. Emery also urged legislators to oppose carbon emissions bills that failed to treat all electric suppliers equitably. Black Hills Corporation believed ACESA would place a particularly heavy burden on coal-dependent electric customers in rural areas across the West and Midwest while benefitting customers on the coasts. Emery hoped that revised legislation would offer ways to offset cost impacts on customers;

The threat of inclement weather moved the Wygen III groundbreaking indoors. Gov. Freudenthal, board members, executives, and other dignitaries helped get the project underway.

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include new, state-of-the-art plants already under construction in any new provisions; and ensure that the trading of carbon credits would not hit customers with an intense rate shock while companies implemented new technologies aimed at complying with public policy.²⁷ In the end, Black Hills Corporation's advocacy on behalf of its customers complemented the efforts put forth by others in and outside the energy industry, and the ACESA never made it to a full Senate vote.

Another major development for the energy industry came late in President Obama's second term when he released a long-promised Clean Power Plan in 2015. This set of proposed regulations for fossil fuel-burning power plants aimed to cut the nation's carbon emissions by 30 percent by 2020. Unlike cap-and-trade, the Clean Power Plan was promulgated by federal agencies controlled by the executive branch of the federal government and, therefore, did not require Congress's approval. The Supreme Court, however, blocked the program's implementation through the end of the Obama presidency.²⁸

These false starts did not, however, stop the executive branch from implementing major regulatory changes. After decades of debate over the role that fossil fuels played in global climate change, the Supreme Court marked a turning point in 2007 when its ruling in *Commonwealth of Massachusetts v. U.S. EPA* categorized greenhouse gases, notably carbon dioxide, as air pollutants subject to regulation under the Clean Air Act. Two years later, after the EPA confirmed that greenhouse gases contributed to climate change, the agency planned to develop and roll out new emissions regulations along with incentives for the retirement of coal-fired plants and for investment in renewable technologies like wind, solar, and hydroelectric power.²⁹

Black Hills Corporation took pride that its generation fleet was "ahead of many of our peers" in terms of environmental standards and efficiencies, but the company's leaders understood that these new regulations would challenge its business model. The new standards were likely to increase the cost of producing electricity and natural gas, "ultimately resulting in significant rate increases to our customers," according to a 2009 strategic analysis.³⁰ New environmental regulations also affected the company's competitive, non-utility businesses. As state governments and the EPA considered new rules around fracking, for example, the company had to evaluate proposed stipulations and weigh them against production costs and commodity prices to ensure that drilling and producing wells in certain areas still made financial sense.³¹

The company joined other industry leaders in lobbying legislators and officials against policies that it believed would be unduly burdensome for customers. However, in parallel, planners went to work on a "Corporate Carbon Dioxide Strategy" that would frame the company's commitment to the spirit and letter of new laws and regulations and "explore ways to effectively integrate" the "wind generation and other renewable resources in our own backyard." In essence, the company sought to build renewables into its supply portfolio without creating high costs for customers or decreasing shareholder value.³²





Top Left: Black Forest Fire Restoration Team, June 2013.

Top Right: As the Missouri River overcame its Iowa shoreline in 2011, Black Hills Energy employees leapt into action, stacking sandbags to protect gas infrastructure and maintain safe, reliable service when customers needed it most. Bottom: Heavy snow snapped trees across the Black Hills region during Winter Storm Atlas in October 2013. Crashing to the earth, many limbs downed power lines. As mounds of snow melted in the days and weeks after Black Hills Power crews cleared timber and restored power.

THROUGH THICK AND THIN

Over the years, blizzards, floods, fires, and tornadoes have periodically devastated the communities served by Black Hills Corporation. In these times of crisis, linemen, technicians, and others headed out into the storm to restore and maintain service — sometimes even after their own homes had been damaged or destroyed. To serve others, they distributed food, water, blankets, and other supplies and helped communities rebuild.

In the spring of 2011, for example, flooding along the Missouri River threatened some 12,000 customers in western lowa. Working around the clock, Black Hills Corporation teams stacked sandbags to protect offices and infrastructure and communicated with employees and customers to explain which gas lines would be temporarily shut down for safety reasons.

Two years later, the 14,280-acre Black Forest Fire displaced 38,000 people in Colorado Springs. Black Hills Corporation repaired damaged gas infrastructure for some 3,700 customers. Emergency crews worked diligently to safely and quickly restore service to the area. The company shut down, inspected, repaired, and reignited service to 98 percent of its customers within three weeks of the start of the fire. Over the next few weeks, Black Hills Corporation withheld utility bills for customers whose homes burned down, and the United Way donated funds from an employee match program at Black Hills Corporation to fire victims.

That October, a historic blizzard named "Atlas" buried much of western South Dakota under wet, heavy snow. Nearly two feet fell on Rapid City overnight, while heavy winds knocked down still green trees. Atlas killed hundreds of thousands of cattle across West River ranches. As the drifts piled high — and well after they melted — teams of Black Hills Corporation employees headed out to restore power to some 25,000 properties.

Through these events and many more, Black Hills Corporation has demonstrated that it is ready and willing to mitigate the consequences of nature's fury.

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Like utilities everywhere, Black Hills Corporation had plenty of experience monitoring and adjusting to national developments in state and federal policies. Following the Aquila acquisition, regulators in some of Black Hills Corporation's new service territories seemed to mirror their peers in South Dakota or Wyoming. They preferred what Black Hills Corporation's General Counsel Brian Iverson called a "leastcost planning basis" and gave the company wide latitude to implement plans that would deliver "reliable and safe and then cost-effective" energy for customers.33 Regulators with this mindset would review and revise these decisions, but even when they amended or rejected the company's plans, officials seemed to recognize that Black Hills Corporation was acting in good faith and responded accordingly.³⁴ Indeed, Black Hills Corporation completed seven successful regulatory rate reviews between 2005 and 2009, and another nine between 2009 and 2014, along with a handful of approved energy resource plans and other filings.35



As commodity prices fluctuated and the global economy endured some tough years, Black Hills Corporation's communications team sought to reassure customers and investors. Upbeat slogans like this one reminded people of the company's dedication to reliable service in the face of adversity.

In other states, however, the competing interests of various constituencies, including utilities, independent power

producers, industrial and residential customers, and environmental groups had created a contentious regulatory atmosphere that was infused with multiple policy agendas. In Colorado, for example, well-organized environmental and consumer activists had spent years encouraging governors and state legislators to adopt environmental statues, regulations, and other governmental directives that influenced utilities' power generation and energy supply plans.³⁶ Regulators had to weigh all of these competing concerns, which often led to protracted proceedings followed by litigated decisions rather than the negotiated settlements and compromises that Black Hills Corporation had experienced in other states.

Many of the rules that shaped such proceedings had been adopted by voters, legislators, and regulators prior to the Aquila acquisition. In 2004, for example, Colorado voters supported a measure requiring shareholder-owned electric utilities to generate 10 percent of all retail electricity sales from renewables by the year 2015. Three years later, the legislature expanded this goal to 20 percent by 2020.³⁷ In 2008, a new law required the Colorado Public Utilities Commission (CPUC) to consider environmental impacts when evaluating utility proposals for acquiring or generating electricity. That same year, Governor Bill Ritter signed an executive order directing the commission to require utilities to draft emissions-reduction plans that would map their progress and outline steps they were taking to meet state-mandated goals. The order also tasked several Colorado agencies with the job of analyzing and describing opportunities to limit emissions from new coal-fired plants.³⁸

EXPANDING THE ENERGY HORIZON

New rules and regulations continued to trickle in after the Aquila integration. The Colorado Clean Air Clean Jobs Act, a law affecting Black Hills Energy and the much larger Xcel Energy — the only two shareholder-owned electric utilities in the state — sailed through the legislature in just over two weeks in 2010. In addition to requiring that renewables account for 30 percent of each companies' generation by 2020, the law aimed to reduce nitrous oxide emissions by 80 percent by 2017, largely by replacing some 900 MW of coal-fired generation with natural gas and renewables.³⁹

On paper, the problems and solutions posed by the government in Colorado looked simple: the state wanted less coal burned, fewer greenhouse gas and smog-producing emissions, and more renewable energy to meet the state's booming demand. Black Hills Corporation knew from experience that it could build and manage new generation, which it saw as a vital service for customers as well as a promising investment opportunity. And the company was confident that it could produce this energy according to Colorado's rigorous environmental stipulations.

The legacies of deregulation, however, still colored the utility business in Colorado. Under deregulation, policymakers and industry advocates had pushed to separate the markets for generation and transmission by promoting the concept of competitively bid, purchased power agreements. Even after the California energy crisis, Colorado regulators continued to use competitive bids in an attempt to hold down short-term power prices. Black Hills Corporation believed that, in the long run, this approach would lead to higher costs for customers and make them more vulnerable to sudden price hikes in the energy sector. This tension was exacerbated by Colorado's desire to move rapidly to more expensive, environmentally friendly, state-of-the-art generation facilities. At the heart of the matter, Black Hills Corporation struggled to meet the goals of the state's policymakers while keeping the price of energy for customers from soaring.

All of these tensions came to a head in two major proceedings, just a few years after Black Hills Corporation closed the Aquila deal, when the company built the Pueblo Airport Generating Station (PAGS). A wholesale power purchase agreement that Aquila relied upon to serve 21 Colorado communities, including Pueblo and Cañon City, was scheduled to expire on the last day of 2011. Xcel Energy had been supplying much of the energy Aquila used to serve 92,000 customers for many years under a long-term contract. Realizing that the regional generation fleet required expensive upgrades, and because strong customer growth was anticipated in its own markets, Xcel chose not to renew the agreement. As a result, 75 percent of the power used along a 100-mile stretch of the Arkansas River Valley would either need to be purchased or generated as of January 1, 2012. As the new owner of former Aquila properties in the region, Black Hills Energy-Colorado Electric would need to solve this problem.

Black Hills Energy began working on a plan to build a series of power plants that would use a combination of natural gas, wind, and coal to produce 380 MW of electricity.⁴⁰ The company submitted its plans in August 2008, but the Colorado Public Utilities

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RINGING THE BIG BELL



On July 9, 2010, members of Black Hills Corporation's senior management team stood on a white balcony overlooking the floor of the New York Stock Exchange. In generations past, this room would have been filled with ticker tape and frenzied businessmen scrambling to signal their trades. In 2010, trade officials in navy blue jackets monitored dozens of bright, digital screens that filled the trade floor.

Dave Emery applauded alongside his colleagues as 4:00 p.m. approached. When the time came, he pressed both hands to the button that controlled the trading bell. He held it there for 14 seconds as rapid, metallic clangs signaled the end of trading. Next, Emery picked up a large wooden gavel and struck a block three times. The bangs of the hammer ended a week's commerce and commemorating 30 years since Black Hills Power & Light's stock first went up on the "big board."

Trading as "BKH" after the company changed its name in the 1980s, Black Hills Corporation's stock endured many ups-and-downs over the years. Yet one thing remained constant: the company's annual dividend had increased every year from 1971 on.

Black Hills Corporation fought to keep up this momentum during the lean years of the Great Recession. According to Dave Emery, the company did all it could to conserve cash after the markets failed. But it was careful to make sure the average dividends went up each year — even if only by a few cents — to keep the streak alive. As of 2018, Black Hills Corporation's annual dividends had grown for 47 consecutive years.



Commission only approved the construction of two simple-cycle, natural gas-fired combustion turbines, which could generate a total of 152 MW of electricity. To meet the remainder of the expected demand (228 MW), the commission established a bidding process to promote competition between independent power producers. And instead of incorporating the costs for providing this energy into the rate base, the commission adopted rules that would allow these charges to be flowed through to utility customers.⁴¹ Black Hills Corporation was disappointed with the decision because the company believed it would lead to volatility in rates and, over the long run, increase costs for ratepayers.

Fortunately, the regulators allowed Black Hills Energy and the company's non-utility generation subsidiary to participate in the bidding process. After a thorough and independent review of the bid proposals, Black Hills Corporation's subsidiary independent power producer, Black Hills Colorado IPP, was awarded a 20-year power purchase agreement. The IPP then announced that it would build two 100 MW combined-cycle, natural gas generating units at PAGS.42

The Pueblo Airport Generating Station under construction in 2010. In order to continue serving customers in Colorado's Arkansas River valley, Black Hills Corporation had to build around 400 MW of generating capacity by midnight on January 1, 2012.

The Pueblo Airport Generating Station went online in 2012. While construction was still underway, however, another challenge emerged. While the Colorado Clean Air Clean Jobs Act moved towards its passage in 2010, Black Hills Corporation determined that the law's provisions would demand expensive updates or full retirement of the 42 MW, coal-fired W.N. Clark Plant on the edge of Cañon City. The company explored converting the plant into a woody biomass facility, but determined that the more cost-effective approach for customers would be to close the plant.⁴³

To replace W.N. Clark, the company proposed building slightly more generating capacity than was immediately necessary in anticipation of future growth in the region.⁴⁴ Pueblo Airport Generating Station already included two state-of-the-art, 88 MW, simple-cycle units, 29 MW of wind power from the nearby Busch Ranch Wind Project, and two 100 MW, combined-cycle units, which were fitted with steam heat recovery generators that used excess thermal energy to produce additional power. Well-calibrated and working together, this cutting-edge system could efficiently produce power and increase or decrease its output as customer demand or the variable output of wind turbines required.⁴⁵ Black Hills Energy-Colorado Electric proposed adding a third 88 MW unit to this complex. Building a turbine of this size, the company believed, would meet customer demand in the short term and create cost savings over the long term as demand increased over the next few years. Any surplus power generated by the plant could be sold to offset construction-related rate increases, thereby softening the impact on customers.

In hearings before the commission, however, opponents argued that the Clean Air Clean Jobs Act only allowed Black Hills Energy to replace the 42 megawatts that would be lost through the decommissioning of W.N. Clark. Any additional power needs, they asserted, should be met by competitive proposals. When the commission staff agreed, Black Hills Energy countered with a proposal to settle with the remaining parties in order to reasonably satisfy their expressed concerns. The company offered to build an 88 MW, simple-cycle turbine, putting the first 42 megawatts of electricity into the rate base and selling the remainder of the plant to a financier under a plan to repurchase it in seven years — a plan that Black Hills Corporation believed could achieve the same long-range benefits as its original plan, but would assuage critics' concerns about the company taking away opportunities from a group of influential Colorado IPPs.⁴⁶

The Colorado Public Utilities Commission rejected this plan, and the regulatory process continued into 2012, when W.N. Clark and two other gas-fired steam units in Pueblo, Colorado were retired. Ultimately, regulators only allowed Black Hills Energy to replace the W.N. Clark facility with a 40 MW, simple-cycle, gas-fired turbine, which would be added to the Pueblo Airport Generating Station.⁴⁷ Although this turbine replaced the generation lost by the early retirement of W.N. Clark, Black Hills Corporation had grave concerns. Building a new, 40 MW unit would result in a higher cost per megawatt and a lower fuel efficiency than the proposed 88 MW turbine. With no way to offset the costs of this new construction, the plan would lead to significant rate increases for customers. And, because building 40 megawatts left no room to meet the growing customer

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demand in Southern Colorado, Black Hills Energy anticipated that rates would increase again the next time the company needed to add capacity to the Pueblo Airport Generation Station.

Black Hills Corporation was especially frustrated because delivering least-cost power options for customers was a deeply embedded value in the company's culture and history. The commission's requirements confused ratepayers and led some members of the public to believe that Black Hills Energy was intentionally gouging its customers.⁴⁸ Unfortunately, in the summer of 2016, local media failed to clarify the situation for customers in Southern Colorado. A *Denver Post* newspaper article, for example, tabulated the impact of authorized rate increases on residential customers and small businesses in Black Hills Energy's service area. Although the story mentioned that incremental rate increases were needed to pay for "new, natural gas turbines and other infrastructure upgrades," it did not delve into the connection between public policy choices and utility prices.⁴⁹

After several years of planning, building, and working with regulators, Black Hills Corporation had developed five power plants, which were complemented by energy produced at nearby wind farms. Together, this system constituted the Pueblo Airport Generation Station, and all of the component parts were operated by a team working from a centralized, on-site command center.⁵⁰ Reflecting on the completion of PAGS, Emery

With sheet metal siding piled at its feet, the skeleton of the W.N. Clark Power Plant stands exposed to the elements. Shut down after 115 years of service, W.N. Clark was among a group of coal-fired plants — including Ben French and Osage — that Black Hills Corporation decommissioned in the second decade of the 21st century.

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pointed out that "the end result was the cleanest, most modern power generation fleet in the state of Colorado."

Accomplishing all of this had been challenging, but through the process, Black Hills Corporation learned some valuable lessons. Technologically speaking, it had honed its ability to create a large amount of efficient, reliable power using a mix of natural gas and renewable resources. As for its experience with regulators, Black Hills Corporation - which had, for most



of its history, only served customers in South Dakota, Wyoming, and Montana — came to recognize that "every state has its own set of rules," as Brian Iverson put it, "and they have their own personality." To be successful, the company had to dedicate time and talent to working with policymakers on their terms. The company also under-

More customers meant more customer service representatives. Here, Black Hills Corporation employees field customer inquiries in the Rapid City call center.

stood that its reputation for honesty and integrity was the "one common denominator across any regulatory body we work with." 51

These efforts were not always enough to solve day-to-day issues with regulators. In the days before Cheyenne Light and Aquila, a single, core group of regulatory specialists usually dealt with state commissions and federal regulators. As the company grew, however, it dedicated teams for specific regulatory bodies. In addition to regulatory specialists working in Rapid City, the company staffed offices in Colorado, Nebraska, and South Dakota.52

Enhancing Relationships With Customers

As Black Hills Corporation worked with new regulators, it also recognized the need to build a rapport with its newly expanded customer base in the wake of the Aquila acquisition. The company established call centers in Rapid City and Lincoln, Nebraska, as well as a field resource center in Lincoln. Staff members fielded customer inquiries, dispatched field crews to repair damaged gas or power lines, managed concerns over rate changes, and worked with corporate communications to build brand identity in new jurisdictions.53 These efforts helped ensure that Black Hills Power and Cheyenne Light scored customer satisfaction ratings above 96 percent on the eve of the Aquila deal. These positive reviews were remarkable given the amount of organizational and institutional changes underway.

Despite the positive reviews, Black Hills Corporation leaders and employees saw plenty of room for improvement. Over the next few years, the company upgraded its customer

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satisfaction systems several times, relying on tried-and-true industry measurers like J.D. Power from 2009 onward and later instituting a Net Promoter Score, a web-based system that could measure customer sentiment immediately following any telephone conversation or in-person interaction with a company employee.⁵⁴ These steps underscored Black Hills Corporation's commitment to continuous improvement and demonstrated its ability to refine customer service even as it covered new geographical landscapes.

As it emerged from the Great Recession, Black Hills Corporation deepened its commitment to a utility-focused business strategy that revolved around power generation, gas and electric service, and a multi-state, vertically integrated model. Going forward, the company's communications team devised new strategies aimed at helping regulators understand how the company's businesses that were not in utility generation, coal mining, or oil and gas fit into its utilities-focused strategy and supported its regulated utilities divisions.55

As Black Hills Corporation learned more about the natural gas utility business, it saw additional opportunities for growth. The company completed Wygen III in the spring of 2010. In 2012, it started construction on the Busch Ranch Wind Project, a 29 MW station powered by 16 turbines, which complemented the gas-fired plants installed at the Pueblo Airport Generating Station.⁵⁶ Responding to new EPA regulations on hazardous air pollutants and industrial boilers, Black Hills Corporation retired the Ben French plant in Rapid City in 2012, followed by Neil Simpson I in Gillette, and the Osage plant in 2014.⁵⁷ The company replaced these three coal-fired units with the natural gas-fueled, 132 MW Cheyenne Prairie Generating Station, the 17th new plant Black Hills Corporation had built since 1995.58 Altogether, these additions to the company's fleet — which had been jumpstarted by the creation of Neil Simpson II and included a small gas plant in Rapid City, the Wygen stations, Pueblo, and more — could produce a total of 1,765 MW of energy.⁵⁹

As it fired up this new generation, Black Hills Corporation monitored the boom-and-bust cycles still destabilizing the energy commodities markets and the changing regulatory environment. The Wyodak Mine had been in continuous service longer than any other surface coal mine in the country and continued to produce a steady 4 million tons of coal per year. It still contained almost half a century's worth of reserves, but its coal had a higher moisture content and lower thermal heat quality than other Powder River Basin products. It was therefore not considered competitive in commercial markets. In 2011, Black Hills Corporation chose to focus its coal sales on mine-mouth customers to encourage profitability. Accordingly, nearly all of Wyodak's coal-fueled, mine-mouth plants, owned in whole or in part, were transitioned to "life of plant" contracts.⁶⁰

During this same period, the oil and gas industry struggled. Coming off the price crashes of 2008 and 2009, Black Hills Corporation sought to define the roles that oil and gas and energy marketing would play in its utilities-based strategy. In good times, after all, energy marketing produced significant revenue. In 2007, Enserco had added over \$34 million to

Exiting the Oil and Gas Business

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Black Hills Corporation's bottom line before struggling through the Great Recession. By its nature, however, the business was highly volatile. Between 2001 and 2002, for example, revenues from energy marketing had dropped from nearly \$84 million to less than \$38 million, and net income fell from \$34.6 million to \$12.7 million. Volatility

Located about 30 miles south of Pueblo, the 29 MW Busch Ranch Wind Project harvested energy from the dry winds that whipped across the plains and plateaus of southern Colorado.

like this was not attractive to investors interested in the steady returns produced by utilities.⁶¹ Meanwhile, oil and gas accounting rules, including SEC-mandated "ceiling tests" that required companies to estimate the long-term value of petroleum reserves based on current prices, combined with market fluctuations sometimes skewed the way Black Hills Corporation's finances looked to shareholders. These forces, as Dave Emery put it, made the company's books "look a little low relative to cash returns." Investors had a tendency to lose a little motivation, he continued, when "the net income wasn't terribly predictable," and this created headaches for the company's leaders.⁶²

Meanwhile, energy marketing continued to pose trading and regulatory risks. In 2009, for example, the Federal Energy Regulatory Commission (FERC) ordered Enserco to pay a \$1.4 million civil fine for some regulatory violations between 2005 and 2007. These violations were not malicious; Enserco actually self-reported them to FERC's enforcement divisions after uncovering some irregularities in an internal audit. Regulators found that the violations had occurred because Enserco lacked the kinds of compliance- or employee-training programs that might have prevented them.⁶³



Enserco also experienced ever-thinning margins as more natural gas pipelines extended from production zones to large commercial centers, eliminating the price advantages that had made energy marketing profitable in the 1990s and 2000s. Over time, Black Hills Corporation came to the conclusion that trading risks and earnings volatility outweighed the benefits Enserco provided. As a result, Black Hills Corporation divested Enserco in early 2012.⁶⁴

To help chart a path forward in the oil and gas business, the company took the unusual step of asking a member of its board of directors, John Vering — who had nearly 40 years of industry experience as an engineer and executive — to step in as interim president and general manager of Black Hills Exploration & Production.⁶⁵ Under Vering's leadership, the company developed a plan to use its oil and gas assets to supply low-cost fuel to the company's utilities in order to help stabilize customer costs. With this strategy in hand, the company developed natural gas wells along with the necessary transmission lines and other infrastructure, and it began to sell oil and gas assets that were not feeding this strategy.⁶⁶

Price fluctuations for both natural gas and oil played a significant role in efforts to develop Black Hills Corporation's reserves of each after the Great Recession. Between 2010 and 2015, for example, the company found that the Mancos Formation in the Piceance Basin, a lucrative, deep-shale gas play on the western slope of Colorado's Rocky Mountains, was its premium natural gas asset, alongside some good reserves in



A mechanic performs maintenance on a Wyodak coal hauler in 2008.

the San Juan basin of New Mexico.⁶⁷ But price fluctuations and market factors slowed the company's ability to economically develop the asset. A nationwide gas surplus kept prices at around \$4 per MMBTU or below, even during the harsh winter of 2013 to 2014.⁶⁸ Similarly, oil returns looked promising through 2013 when American oil consumption spiked to 18.9 million barrels per day.⁶⁹ North Dakota and Texas (which produced more oil than 11 of the 12 OPEC countries) led the way, and BHEP drilled additional Powder River Basin wells in 2013 and 2014, hoping to catch some of the boom. Then prices plummeted again in mid-2014, which, as the company put it, "caused our planned drilling programs to become uneconomical."⁷⁰

In the middle of these oscillations, BHEP considered a major strategic move. BHEP assets in the lucrative Williston Basin of North Dakota sat beneath a vast expanse of open prairie that stretched into Canada. The basin had experienced a huge oil and gas boom on the heels of the Great Recession. Thousands of investors and job seekers flocked to towns like Williston, which grew by some 67 percent between 2010 and 2014, making it "the fastest growing economy in the nation."⁷¹

Like many players in the energy industry, Black Hills Corporation had moved into the Bakken and Three Forks areas of the basin, buying up oil and gas wells and leases and reaping returns from the boomtime economy. By 2012, BHEP had amassed a portfolio consisting of ownership interests in more than 70 wells and nearly 30,000 acres of leased oil and gas property, which produced some 149,000 barrels of oil and 171,000 cubic feet of natural gas at the end of the second quarter of 2012. Drawing on experience and expertise, company leaders knew that the boom could not last.

In July 2012, Black Hills Corporation sold 85 percent of BHEP's assets in the Williston Basin — many of which were jointly owned with other investors — to Denver-based energy company QEP. The sale brought a quarter-billion-dollar windfall, and it happened at just the right time.⁷² Petroleum prices fell dramatically by the middle of 2014, and soon, the population in towns like Williston leveled off as many short-term oil and gas boomers packed their trucks and left.⁷³

Following this sale, continuing price fluctuations forced another strategic review of BHEP in 2015 and led to the decision to shift the business away from commodities markets. Corporate leaders capped capital expenditures on oil and gas in 2015. Meanwhile, the company began looking for an inexpensive way to maintain its interests in the Powder River Basin and keep its options open for a sale when commodities prices allowed.⁷⁴

As it made these preparations, the company focused on developing an oil and gas business model that would provide gas to its utilities on a cost basis that was protected from market volatility. The program, dubbed "Cost of Service Gas," would be "a win-win" for customers and shareholders.⁷⁵ As Linn Evans put it, "the Cost of Service Gas Program [would] be a long-term mechanism to support lower and more stable natural gas prices for our customers." Furthermore, he continued, the program would "provide our investors with new



earnings growth opportunities" from the sales of natural gas from BHEP's remaining properties in the Piceance and San Juan Basins.⁷⁶ Black Hills Corporation also expected the program to generate operational efficiencies, since owning and controlling its own gas supply would allow the company to continue vertically integrating its utility businesses and enhance the "utility-like profile of [its] other business segments."⁷⁷

Black Hills Corporation submitted regulatory filings for its Cost of Service Gas Program in all of its utility service territories in the fall of 2015. Since the proposal was unique and new to most utility commissioners, it moved slowly, and hearings in various states continued into 2017. In Colorado, the PUC dismissed the filings almost immediately, instructing the company to detail the potential effects for individual customers before it refiled the application. Nebraska, on the other hand, signaled early support for the idea but also requested that Black Hills Corporation conduct additional analyses of proposed customer benefits.⁷⁸

As these filings moved along, Black Hills Corporation discovered a critical flaw in the Cost of Service Gas model: commodity prices fell farther than expected when the program was originally designed. As each new projection continued to forecast lower long-term natural

Advancements in the hydraulic fracturing, or "fracking," of horizontal wells opened North Dakota's Williston Basin to an oil and gas boom in the mid-2000s. Instability in the oil and gas markets led Black Hills Corporation to divest most of its assets in the region in 2012.

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gas prices, the company realized that obtaining regulatory approval for the program was unlikely. Despite years of effort to convert its gas assets into a strategy that could insulate customers from a gas price-induced rate shock, it became clear that Cost of Service Gas would not work.

Following its decision to abandon Cost of Service Gas, Black Hills Corporation recognized that in order to best serve its shareholders and focus on the core utility business, the company would need to exit the oil and gas exploration and production business altogether. In 2017, the company commenced the sale of all non-core oil and gas assets, and that autumn, the board of directors authorized a complete exit from the exploration and production business, which was essentially completed by mid-2018.⁷⁹ With these decisions, the strategic commitment made in 2004 to serving utilities customers and their communities became even more important and set the stage for another remarkable period of growth.



SOURCEGAS

In the 1960s, a law student at the University of Missouri named Richard Kinder befriended his classmate, a young man named William Morgan.²⁴ More than 30 years later, their friendship would evolve into an enormously successful partnership. One product of that partnership was the creation of SourceGas, a natural gas utility that Black Hills Corporation acquired in 2016.

The history of SourceGas extended back many generations, to the years before Kinder met Morgan. In 1927, a group of entrepreneurs incorporated the Kansas Pipe Line & Gas Company and executed an innovative and risky strategy. Most industry insiders of the era, after all, believed rural gas service a losing proposition.²⁵ Kansas Pipe Line & Gas Company proved them wrong. Within a decade, the company grew to serve rural towns across Kansas and Nebraska.²⁶ After purchasing the Nebraska Natural Gas Company in 1941, the company reincorporated as Kansas Nebraska Natural Gas Co. and established a central office in Hastings, Nebraska. With strong growth, the company began trading on the New York Stock Exchange around 1970. Controlling some 16,000 miles of gas pipelines in Wyoming, Kansas, and Nebraska, the company moved to Lakewood, Colorado and rebranded as KN Energy in 1983. Over the next several years, KN Energy staved off three separate takeover attempts by companies belonging to investor T. Boone Pickens.²⁷

Meanwhile, the friendship between Richard Kinder and William Morgan matured from that of classmates to colleagues. After law school, both men went to work for a businessman named Kenneth Lay at Florida Gas Transmission. Within a few years, Lay and Morgan moved to another company, Houston Natural Gas, which Lay managed. Morgan and Kinder were reunited in 1984, when Houston Gas acquired Florida Gas. The next year, InterNorth, an Omaha-based energy company, bought Houston Gas and changed the company's name to Enron. Lay became the CEO of Enron, and while Kinder worked his way up to an executive position, Morgan managed several pipeline networks. By 1990, Kinder had become president and COO. Many people believed that when Lay's contract expired in 1996, Kinder would succeed him.²⁸

As Kinder prepared to assume the helm at Enron, he and many in the industry were surprised when Enron renewed Lay's contract. Lay's decision to stay prompted Kinder to leave Enron. He spent some time evaluating the industry and planning his next move. Ultimately, he reached out to William Morgan and proposed that the pair reunite once again and go into business. Morgan agreed. Together they founded an investment group called Kinder Morgan Energy Partners. They quickly acquired an Enron pipeline subsidiary valued at \$325 million, reorganized it, and cut costs. Using the profits from these strategic moves, Kinder Morgan set out to build its own gas distribution empire.²⁹

While Kinder and Morgan were going through their departures from Enron and the creation of Kinder Morgan in the mid-1990s, KN Energy continued to grow through consolidation. The company merged with another Houston-based company called American Oil & Gas in 1994. Four years later, it went through another merger; this time purchasing MidCon Corp., which owned one of the most extensive gas networks in the United States. Debt from this \$4 billion deal squeezed KN's profitability and Kinder, who had begun a term on KN's board of directors in 1998, saw an opening. He left KN Energy's board and orchestrated a merger that left Kinder Morgan in control of KN Energy's assets. In the autumn of 1999, KN Energy became Kinder Morgan, Inc. The company was very successful, and Richard Kinder became one of the wealthiest people in the world. His fortune grew further when he and Morgan sold KN Energy in 2006.³⁰

Sensing potential for significant returns, GE Energy Financial Services partnered with a hedge fund called Alinda Capital Partners to buy Kinder Morgan's gas distribution assets in 2006 for \$710 million. They named



the new company "SourceGas." After acquiring the Arkansas Western Gas Company in late 2007, SourceGas had 960 employees who served 420,000 customers stretching from Colorado to Arkansas, as well as a small service territory in Hermosillo, Mexico.

When Black Hills Corporation acquired SourceGas in 2016, SourceGas owned some 17,700 miles of pipeline and a handful of gas storage facilities.³¹ The deal expanded Black Hills Corporation's footprint in many of the states it already served and pushed the company into new service territories in Arkansas. As the two companies underwent the corporate integration process, Black Hills Corporation welcomed its new customers and employees. Emphasizing shared values, Black Hills Corporation, unifying employees under the Black Hills Energy name and logo and reminding them that, going forward, their future would be "stronger together."³²

EXPANDING THE ENERGY HORIZON



IVAN VANCAS, GROUP VICE PRESIDENT FOR NATIONAL GAS UTILITIES

A new generation of consumers and employees was coming of age as Black Hills Corporation worked to unify with Aquila and weather the Great Recession. Entrepreneurs everywhere battled to invent a world-changing source of renewable energy. Facing these, and even larger, changes on the technology horizon, Black Hills Corporation prudently explored "game changer" energy solutions. Smart evolution into this new era, the company knew, would come from blending the institutional and industry knowledge of its baby boomer employees with the innovative instincts and new energy of millennials.

CHAPTER THIRTEEN

GAME CHANGERS



Many of these digital innovations came with their own unique challenges. Securing the company's networks from hackers, spamware, and phishing schemes became more challenging, as did protecting customers' accounts and personal data. The company had to find ways to retrain the large portion of its workforce that had grown up in an analog world. Many baby boomers, for example, had to be brought up to speed as new geographic information system technologies replaced older mapping techniques.³

Yet all of these issues paled in comparison to the challenges posed by new technologies that threatened the viability of the existing energy market. All over the world, engineers, environmentalists, and entrepreneurs labored around the clock, hoping to become the next Thomas Edison or Nikola Tesla by discovering an affordable, renewable, and completely clean source of energy that could safely and reliably power humanity for generations to come. Within the industry, analysts and experts called these new developments, which were primarily storage and self-generation technologies, "Distributed Energy Resources (DER)."4

The primary threat these DER presented to the business model of regulated utilities was known as "disintermediation" — the idea that the technologies would not only change the source of customers' energy, but would decouple customers' reliance on and relationship with large, centralized energy producers and distributors altogether. In other words, if every home in America had a small, self-contained, and fully sustainable source of heat and electricity attached to its roof or installed in the backyard, the role of centralized energy providers like Black Hills Corporation would diminish, stranding huge investments in power generation, transmission, and distribution infrastructure.

Formerly the stuff of science fiction novels, the possibilities of DER and public policies that heavily subsidized the development and use of these new technologies became more real in the early 21st century. The prospect of these new technologies had a significant impact on financial markets. In 2014, the bond raters at Barclays Bank downgraded the entire bond market across the utilities sector "due to the challenge from customers' increasing opportunities to cut grid electricity consumption with solar and battery storage." The bankers went even further, suggesting that investors "move out of utility bonds wherever solar-plusstorage is becoming cost competitive." Analysts pointed out that in Hawaii, the market was already competitive, and other states with higher electric rates, like California and New York, could get there by 2017 or 2018. The rest of the nation would be quick to follow.⁵

"DER" or "solar-plus-storage" options, loomed as "game changers" in the utility industry, but nobody knew exactly whether a combination of technologies or a single new invention would change the world. Although there was no predicting if or when it would arrive or



s Black Hills Corporation expanded geographically, it — and the rest of the world — also pushed further into the digital realm. The proliferation of high-speed wireless internet, the increasing ubiquity of hand-held smartphones and tablets, and the dawn of social media all combined to revolutionize the way people lived, worked, played, and communicated. New technologies also changed the way companies, both large and small, did business. Generally, these innovations created faster and smarter service, greater transparency for customers, and a safer, better-informed, and more streamlined workforce.

Inventors and innovators sought new sources of energy that did not rely on fossil fuels. With a concept called "gravity trains," heavy, concreteladen cars were pulled up steep hills, thereby building potential energy during low demand periods. When demand peaked, engineers could release the cars and capture the kinetic energy created as they rushed downhill.

Black Hills Corporation, which had launched its website in 1996, rolled out a new software platform in 2007. It included information for customers on ways to conserve energy and cut monthly bills.¹ A few years later, it offered the ability to pay bills online and then over mobile devices.² Investors, regulators, and customers could all review corporate filings and receive real-time updates on developments at Black Hills Corporation. Meanwhile, remote meter reading translated to faster delivery and greater accuracy of bills - especially in the rural reaches of the company's service territory. Company-issued iPads increased efficiency of scheduling and gave technicians and line workers the ability to check in and address questions to their more senior colleagues, increasing the quality of their work while



<image>

The Black Hills Corporation homepage in 1997.

The company's web page in 2007.



The Black Hills Energy site in 2018.

AN EVOLVING WEB PRESENCE

The internet has revolutionized almost every aspect of daily life. It continues to change the way the world does business. Following the launch of the first commercial web browser, by the company that would become Netscape, in October 1994, companies everywhere raced to find innovative ways to position themselves online, even as they struggled to understand how customers, suppliers, and competitors would use these new technologies.

Black Hills Corporation launched its first website in October 1996. It offered a primarily educational user experience: visitors could take a virtual tour of the Neil Simpson II Plant and Wyodak coal mine. A children's section offered printable coloring book pages and safety tips. Customers could also learn how to install electric service in new homes. Black Hills Corporation posted tips on how to save energy and lower monthly bills.

As the internet and the devices people used to connect to it evolved and expanded, Black Hills Corporation kept up the pace. Every few years, the company rolled out a redesigned webpage with new features. Internet access also evolved over time: in the 1990s, many people could only get online at public libraries and schools, and most families were lucky to share a desktop computer. As time went on, laptop computers, smartphones, and tablets became commonplace, giving individuals personal access to the internet.

From these devices, users could learn a lot about Black Hills Corporation. The company posted job advertisements, press releases, and feature stories about new initiatives underway in local communities. Customers could pay their bills online, report outages and problems, connect with customer service representatives, or communicate with the company over social media. Investors, meanwhile, could review corporate filings, and monitor daily changes to BKH's stock price.



what form it would take, there were a few likely candidates. New "flow batteries" promised to extend the life of power storage indefinitely, while "phase-change thermal storage" technologies stored high volumes of energy, then harnessed it as chemicals shifted between the states of matter. Researchers also looked at alternative fuels like hydrogen, which left only water and oxygen as byproducts of consumption. "Renewable natural gas" — or fuel created, captured, and stored from biomass sources like landfills —

Organic materials emit gasses as they decompose, offering a source of renewable energy. Many in the energy industry — including Black Hills Corporation — saw the merit in exploring new ways to capture, process, store, and use "biogas" to serve customers.

also promised a low carbon footprint relative to traditional fossil fuels.⁶ Each of these ideas showed promise, but all suffered from one critical pitfall or another. Economic inefficiency, weak storage capacity, a lack of economies of scale, vulnerability to environmental conditions like weather, or insufficient power loads to meet demand prevented each from having a major impact on existing energy markets. Until engineers could solve these issues, no game changer could dethrone fossil fuels, nuclear energy, utility-scale renewables, and the power grid as the primary sources of base load electricity around the world.⁷

With all of these possibilities before it, Black Hills Corporation held firm to what it knew. The company asserted that "coal-fired generation remains the most cost-effective source of electricity" for customers. Accordingly, corporate leaders felt that they "owed it to our customers and shareholders to evaluate and encourage the development of technology that maintains the commercial viability of this abundant, domestic fuel source."

And they continued to produce coal-fired energy efficiently, even as state and federal emissions regulations tightened and new emissions-mitigation techniques reduced its cost effectiveness.⁸

The company took a similarly pragmatic stance towards renewables: windless and cloudy days could ruin wind and solar output. And even though the cost of renewable power had been on the downslope for years, the company remained wary because wind and solar were still heavily subsidized, largely through federal income tax credits. With many of these programs dependent on political support, Black Hills Corporation cautiously integrated renewable energy sources when it was in the best interest of customers to do so.⁹ In Colorado, which aggressively mandated the use of renewables, the company complied but strove to do so in a manner that would minimize customer rate impacts.

Drawing on lessons learned with proposals like "cap-and-trade" and the Clean Power Plan, Black Hills Corporation understood that, in addition to costs, political uncertainty itself posed serious challenges. To lessen the cost impacts of renewable energy on customer bills and to mitigate risks associated with the increasingly unpredictable state of policymaking, the company embraced a philosophy of "just-in-time compliance." This meant that, although Black Hills Corporation anticipated and was committed to obeying all new laws and regulations, it would wait until any such rules were officially implemented. This was part of a broader effort to ensure that Black Hills Corporation could insulate itself against shifts in the political winds while remaining agile enough to take advantage of new opportunities if and when they arose. At the same time, the company wanted to be able to move away from assets and readjust strategies when they did not fit the new energy paradigm.

Black Hills Corporation, for example, saw potential — and obvious synergies with its own strategy — in biogas, a renewable gas byproduct made from the breakdown of organic materials often found in landfills. In late 2016, Black Hills Corporation completed a biogas project in Dubuque, Iowa, and after this project went online, the company launched more than a dozen similar initiatives.¹⁰

Of the various emerging technologies in the electric power industry, cogeneration and combined-cycle technologies offered the most immediate promise to Black Hills Corporation. Cogeneration, or "combined heat and power (CHP)," created electric power and useful thermal energy at once, rather than using separate boilers and power plants. It had been utilized by small, steam-powered plants early in the 20th century, often in industrial settings, before big, centralized utilities slowly replaced cogeneration at midcentury. When the Public Utilities Regulatory Policy Act incentivized cogeneration in 1978, the technology once again became popular as small producers sought to plug into larger transmission systems during the wholesale boom of the deregulation era.¹¹ Black Hills Corporation even owned a couple of cogenerated IPPs in the 1990s and early 2000s — but across the industry, energy prices and instability had stifled interest in cogeneration in the first few years after Enron's collapse.¹²

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By the 2010s, however, technological advancements offered new possibilities for pairing combined-cycle and cogeneration techniques in new plants, thereby generating more efficient power while reducing emissions.¹³ Like cogeneration, combined-cycle technology had been around for decades. First used in 1949, these systems harnessed heat exhaust from a gas turbine, using its energy to power supplementary generators, culling more electricity from a single fuel load. As the technology advanced, combined-cycle plants became even more efficient and offered a level of flexibility that allowed their systems to scale up or down to meet energy demands.14

By combining these technologies with renewables, utilities could tailor energy production to customer demands and production conditions. On clear, windy days, an energy complex could draw wind and solar energy to fill portions of customer needs, while running a smaller, traditional, simple-cycle unit to fill out any remaining demand. If the wind died down, dark clouds rolled in, or demand increased, the utility could fire up its large, combined-cycle turbine to provide extra electricity. Given the efficiency of this process, investing in combined-cycle plants often carried the added benefit of exceeding environmental requirements, thereby giving utilities some wiggle room as they prepared for further regulatory requirements down the road.

The Pueblo Airport and Cheyenne Prairie Generating Stations embodied Black Hills Corporation's implementation of these technologies. Pueblo Airport Generating Station (PAGS) included two combined-cycle units and three simple-cycle units. The simple-cycle turbines, however, were paired with wind from the Busch Ranch Wind Project 30 miles outside of Pueblo. Black Hills Corporation installed cutting-edge turbines that could compensate for the intermittency of wind, all while operating at the highest fuel efficiency in the industry — even as the turbines scaled from a half load to a full load.¹⁵ ln 2017, the company completed the Peak View Wind Project, a 34-turbine farm that would feed another 60 MW into the Black Hills Energy systems that powered southern Colorado.¹⁶

Further north, Cheyenne Prairie operated one simple-cycle unit and one combined-cycle unit in tandem with wind energy that Cheyenne Light, Fuel & Power purchased under a long-term contract from the Duke Energy-owned Happy Jack and Silver Sage Wind Farms.¹⁷ Mark Lux helped articulate Black Hills Corporation's strategy. It combined one of Black Hills Corporation's tried-and-true business models with some skills the company had developed more recently in Colorado. To meet regulatory requirements, Black Hills Corporation had combined gas and renewables at PAGS. At Cheyenne Prairie, the company saw that it could integrate these systems into a 21st century version of the mine-mouth model that fueled the Wygen plants. Black Hills Corporation "duplicated the energy complex model" that had been so successful at the Wyodak Mine, Lux said, "with some of our new gas-fired generation as well as our renewable generation." These plants were designed with "multiple generating shafts to provide reliability for the customer." A combination of gas and renewable fuels could fire up or down as needed to ensure safe and effective power delivery.¹⁸



The availability of wind energy at Cheyenne Prairie also opened the door to a historic partnership between Black Hills Corporation and one of the world's largest technology companies: Microsoft. As it planned to expand its cloudbased storage and information technology services around 2010, Microsoft started looking for a location to build a power. new data center that could serve the Intermountain West. Microsoft concluded that, given its fiber optic infrastructure, cool climate, and affordable energy prices, Cheyenne would be a good fit. Knowing that a massive data center would require a great deal of energy and, given its corporate commitment to using renewable energy wherever possible, Microsoft wanted an energy provider that could help it meet its goals.¹⁹

Black Hills Corporation's director of Resource Planning, Chris Kilpatrick, was working with the local economic development group in Cheyenne, which was seeking to recruit a large, but unnamed, company to their city. At first, Kilpatrick only knew "that electricity was a very important cost to this customer." Kilpatrick and his team put together a recruitment package. In August 2012, he was on vacation when he received a call from Brian Janous, the director of Energy Strategy at Microsoft, who said that Microsoft "wanted to bring a lot more generation to Cheyenne. They had plans," Kilpatrick remembered, "to grow their demand from a quarter to half of the size of Cheyenne."²⁰ In other words, the project Microsoft was planning would require up to half of the power that the whole city of Cheyenne was already consuming.

Mimicking the successful mine-mouth strategy that long served Black Hills Corporation at the Wyodak Mine and nearby energy complex, the Cheyenne Prairie Generating Station draws on Cheyenne, Wyoming's ample supply of natural gas to generate 132 MW of

large project would be a tough sell. According to Kilpatrick, Janous had a strong background and understanding of the regulatory process. This was not always the case with Black Hills Corporation's commercial customers in and around Cheyenne, he continued, but it was vital to the success of the Chevenne deal. "It allowed us to find common ground between both companies," Kilpatrick said, "because we understood what the regulator was looking for and how we needed to, and always did, keep every customer in mind and made sure that we kept protections in for everybody."²⁴

Together, Black Hills Corporation and Microsoft toiled for months to make the case to Wyoming's commissioners. They succeeded in a big way. In his public testimony in June 2016, Bryce Freeman, an administrator at the Wyoming Office of the Consumer Advocate - an entity that was often critical of plans put forth by utilities - told the WPSC that the tariff proposed by Black Hills Corporation and Microsoft presented "a nearly perfect solution to the problem of adding new large loads to the company's system and the risks and uncertainties that are inherent in that proposition."²⁵ With that, Black Hills Corporation executed the largest, single utility transaction in its history.

"The Great Crew Change"

Technology was not the only thing changing the day-to-day operations at Black Hills Corporation. As part of the long-term integration and unification efforts following the Aquila transaction and other, smaller acquisitions that followed, the company set out to better understand and relate to its newly expanded base of employees. As of May 2014, the company had 2,074 employees, with over 1,000 employees almost evenly split between the gas and electric utilities. The other half was divided between the non-regulated holdings and corporate service wings.²⁶ One statistic was reassuring: the average age of a Black Hills Corporation employee was just over 45 years old, suggesting a general balance between youth and experience. But this figure masked a more startling fact: over 45 percent of the company was over 50, and because the benefits plan made most employees eligible for retirement at 62, a huge proportion of the company was slated to leave within about a decade. Indeed, fully one half of the utility workforce could retire by 2024.²⁷

Recognizing that the bulk of the company's experience and institutional knowledge rested within this cohort of soon-to-be retirees, Human Resources generated a department-by-department, strategic workforce plan to prepare for the future. First and foremost, the company sought to get ahead of the retirements by instituting recruiting and promotion programs and building hire-ahead provisions into its rate reviews. Company leaders also fostered relationships with technical schools, colleges, and universities in the communities Black Hills Corporation served, hoping to spur student interest in the energy industry.²⁸ In a similar recruitment initiative, the company sought to attract the attention of potential employees ranging from high school students to military veterans and beyond. The company advertised links to the resources available at organizations like the Center for Energy Workforce Development, a consortium of energy providers, contractors, trade associations, and unions that worked to raise awareness and develop workforce strategies

This was an exciting, but challenging, opportunity for Black Hills Corporation. The company would need to develop a plan that would provide sufficient power to meet Microsoft's needs (using significant portions of wind energy) and deliver cost savings that would make the deal attractive. Black Hills Corporation would also need to build in protections for its other customers in Cheyenne. These precautions were necessary in case Microsoft decided to

Applauding the innovative tariff that split the benefits of Microsoft's Cheyenne data center between customers and both companies, one Microsoft official called Black Hills Corporation "a banner for what utilities should be.

pull out of the deal somewhere down the road. If that happened, existing Black Hills Corporation customers would not be forced to repay the costs of the investment.²¹ As a shareholder-owned utility, Black Hills Corporation knew that it would need to develop this plan as a win-win for customers and investors. In short, Kilpatrick said, "we had to think of something different to accommodate such a disruptive growth pattern."22

Black Hills Corporation worked with Microsoft to plan this massive undertaking, and Microsoft opened its data center just west of Cheyenne in January 2014. The following spring, Microsoft announced plans to expand the operation. When complete, the facilities would draw from the Cheyenne Prairie Generating Station, relying as much as possible on 59 MW of wind energy purchased from the Happy Jack and Silver Sage Wind Farms as well as another 178 MW purchased from a wind farm in Kansas. Under the deal, Black Hills Corporation could use energy from a series of emergency generators that Microsoft installed at its data centers to meet peak-demand requirements for Cheyenne Prairie's service territory.23

With the data center up and running and the technical aspects of the expansion planned out, Black Hills Corporation and Microsoft went to the Wyoming Public Service Commission (WPSC) for approval to execute the new arrangement. They knew such a



for the electric, natural gas, and nuclear energy industries. The company also partnered with Troops to Energy Jobs, a Washington, D.C.-based organization that sought to place former members of the armed forces into utility and engineering positions throughout the energy industry.29

Overall, Black Hills Corporation filled about 60 percent of its positions with external candidates, while the remainder were lateral moves or promotions for existing employees. For upper-tier

leadership, the company strongly preferred inside hires unless there was a specific need "to bring in a fresh perspective." As it prepared to replace large portions of its workforce in the second and third decades of the 21^{st} century, Black Hills Corporation devoted time, resources, and energy to developing strong succession plans and, as Jennifer Landis said, "growing leaders." Dave Emery and Linn Evans spent several weeks a year evaluating the

performance of managers across the company, seeking to ensure that people were meeting expectations and were well-positioned for development and advancement based on their skillsets. Most importantly, Black Hills Corporation took care to ensure that every team member was ready to meet the challenges of the future.³⁰

The company also helped employees and managers stay in contact with executive officers throughout the year. With a service territory that, by February 2016, extended some 1,600 miles from Cody, Wyoming to Blytheville, Arkansas, leaders used videoconferences and quarterly, in-person "coffee talks" to discuss a range of issues with employees. At the end of every calendar year, the senior leadership team paired off and covered the entire service territory to make sure that every Black Hills Corporation employee had at least one in-person interaction with a corporate officer per year.³¹ These steps helped keep the company on the lookout, and the HR department was always "spotting talent and potential, and then putting resources and challenging assignments" before people to test their mettle. "In some cases," Landis said, "we have actively managed people's careers for up to five years" before placing them in the leadership position best suited for them.³²

The company also searched for ways to manage the pace of retirements. "Payroll's the biggest expense item on just about every company's" books, said Bob Myers, so the question was, "how do we introduce... systems that make us more efficient" and prepare the company to become the "utility of the future," all while maintaining a knowledgeable workforce and managing retirements?³³ One answer lay in developing incentive programs

younger employees could learn from seasoned veterans.

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to retain would-be retirees for another year or two so they could transfer knowledge and skills to those promoted or recruited to take their place.³⁴

Recruiting to Black Hills Corporation's offices located in predominately rural areas could be difficult.³⁵ Although the company had offices outside popular metropolitan hubs like Denver and Omaha, the corporate headquarters remained in Rapid City. For job candidates looking for the lifestyle offered by major metropolitan areas, the Black Hills of South Dakota could sometimes be a tough sell. On the other hand, candidates born and raised in small towns or cities leapt at an opportunity to take a good job close to family or in a community that reflected their values or experience. Moreover, people with this kind of background were often well-suited to serve the many non-metropolitan customers and communities in Black Hills Corporation's territories. By offering competitive salaries and benefits packages and by cultivating an attractive and amiable corporate culture, the company was able to meet its hiring needs. Landis noticed that over time, and at least as far as Rapid City was concerned, "once we get people to the Black Hills, they tend to really enjoy the area and tend not to leave."36

Once good people had been recruited to Black Hills Corporation, the company worked hard to cultivate a corporate culture that would do more than improve service or strengthen the bottom line. Dave Emery envisioned a culture and reputation that would allow the company's brand to resonate throughout the states and communities Black Hills Corporation served. "We encourage our employees to be really active in their towns," he said. "We've got mayors, we've got city councilmen, we have fire chiefs, and lots of them across all of our territories." Supporting employees in these roles underscored Black Hills Corporation's commitment to partnership with communities. "As a regulated utility," Emery continued, "someone draws a line on a map and says, 'Black Hills, you get to serve the area inside this line.' Well, the only way you grow and thrive as a company is if the community inside that line on that map grows and thrives, right? And that's been our business philosophy forever."37

Under Emery's leadership, the company developed an overall hiring and employee development strategy focused on aligning the company's culture, people, and mission into a single, seamless vision. In 2013, the company announced four strategic goals that would weave all of this together and prepare the company for continued success: Valued Service; Profitable Growth; Better Every Day; and Great Workplace. By emphasizing these

Long-time employees retain both technical expertise and institutional knowledge. In an effort to capture these insights and pass them along, Black Hills Corporation sponsored a variety of trainings and events where





To better understand the on-theground challenges employees faced, members of Black Hills Corporation's senior leadership team, including President and COO Linn Evans, paired off and visited all of the service territories at least once a year.

strategic objectives, Black Hills Corporation sought to improve the work it did while helping ensure that any time an employee interacted with a customer or walked into a state capitol building to meet with regulators, they would project Black Hills Corporation's long-term commitment to keeping the interests of local communities in mind.

The "great crew change," as it was called in some internal documents, was also a chance to shift an old pattern. Utilities had

long been a male-dominated industry. Throughout Black Hills Corporation's history, most high-ranking executives, and even department managers, were white men. With the exception of Dave Emery — an enrolled member of the Cheyenne River Sioux Tribe — every CEO had also fit Members of the Black Hills Corporation family in Pueblo, Colorado socialize during a meal to honor retiring employees and recognize staff achievements.

this mold. Roxann Basham, who had served in different roles as a leader at Black Hills Corporation since the mid-1990s, remembered that "I was 'the one' for a long period of time." When she first came to the company in 1983, there was one female board member and one female corporate officer. "But it was a number of years where it was only one of each," and women in leadership were few and far between. She noticed a shift around 2012, when it seemed that the company started to "do a much better job of developing employees overall."³⁸

The company realized that the old company culture had ignored half the available talent. "We can't afford not to include 100 percent of the population," Jennifer Landis said.³⁹ Over the next several years, the company created several diversity initiatives, including ASPIRE, a program that focused on recruiting women and helping to cultivate their talent. The results of these efforts were apparent within a few short years: by early 2017, roughly 30 percent of all corporate and subsidiary officers and 30 percent of the board of directors were women.⁴⁰

In addition to electing three women directors, the board grew more professionally diverse in the first half of the 2010s. For generations, the board had been comprised of prominent businesspeople, largely from the Black Hills region. As the company grew in scale and scope and faced new technological and industry-wide challenges, Emery and other leaders recognized the need for a more professionally and geographically diverse board. Accordingly, the company recruited new members with expertise in industries with expansive, interstate service networks; cybersecurity; and other areas.⁴¹

As the company expanded into new territories and absorbed new employees, it also had to revisit two longstanding issues: organized labor and safety. With the Aquila acquisition,

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the company had absorbed four new collective bargaining agreements and worked locally with those unions while trying to influence national, labor-related policy. Black Hills Corporation preferred to set competitive wages and benefits similarly for all employees to bolster recruitment and prevent organizing among its workforce. So, when a new labor law called the Employee Free Choice Act (EFCA) came before Congress in the summer of 2009, the company joined others inside the energy industry who lobbied heavily against it. They succeeded, and the law never made it out of the Senate.⁴²

Although EFCA failed, Black Hills Corporation closely monitored labor relations and employee affairs. By 2014, existing collective bargaining agreements covered nearly a third of the company's total workforce and just over 50 percent of utility employees. By late 2016, the number of unionized utility employees fell to just over 40 percent. During the Aquila integration, the company negotiated uniform contract language regarding employee benefits and other programs for all its unions. To foster healthy working relationships with organized labor, it also sponsored a yearly "benefits summit," where corporate leaders worked to address union leaders' concerns while ensuring that the benefits offered in all six contracts, as well as the benefits offered to all non-union employees, would remain nearly identical. This effort, the company said, "helps us avoid significant costs associated with administering multiple and unique benefit programs and benefit levels across our utilities."⁴³

While it strove to keep employee benefit administration costs low, the company also focused on minimizing safety risks. As it grew, Black Hills Corporation understood that more employees and a larger territory would require additional diligence. Corporate leaders believed that making sure every employee enjoyed a safe work environment every day was a moral conviction first and a cost-savings initiative second. Linn Evans came to Black Hills Corporation from a background in underground mining, "where," as he put it, "fatalities happen way too frequently." He was accustomed to incorporating strong safety standards in the workplace. A robust and focused safety strategy offered a "win-win" situation, he said, because in a world of unknowns, "safety is the easiest thing you can manage that reduces costs, improves morale, improves your culture, and means you're doing the job right."⁴⁴ Accordingly, Evans and other leaders set about instituting a



As part of its ongoing efforts to articulate its mission, vision, and values—both internally and for regulators, investors, and customers— Black Hills Corporation developed these four strategic goals in 2013. Together, they helped to align and set priorities.

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new communications strategy that promoted a safe culture, reinforced through regular trainings, and the requirement that "every meeting with two or more people began with a safety talk." The company successfully decreased its Total Case Incident Rate the industry measure for on-the-job injuries and other safety incidents by 74 percent between 2010 and 2015.45

Evans believed these efforts were "the best way for the company to really express to its employees the idea that



'We care about you, and we care about each other, and let's act that way," which extended to a focus on overall personal wellness for employees and served as a strong recruitment tool. When prospective hires could tell that Black Hills Corporation cared about them and their families, Evans believed, that cultural element could give Black Hills

Black Hills Corporation sought to become the safest utility in the nation. Here, crews participate in natural gas safety training in Ozark, Arkansas in 2018.

Corporation an edge over its competitors and help bring in strong, new talent.⁴⁶

The culmination of these efforts, according to Mark Lux, was the development of a new goal at Black Hills Corporation: become "the safest utility in the nation."⁴⁷ Although the company's performance was outstanding and its safety incidents were well-below the industry average, it still had a ways to go. Indeed, Black Hills Corporation strove to push its safety rating "beyond zero," which meant sustaining a no-incident record indefinitely.⁴⁸

Altogether, the company's approach to making Black Hills Corporation a great place to work - providing competitive wages and benefits, promoting safety and wellness, and developing a positive and friendly work environment — produced positive results. In 2014, internal surveys suggested that 70 percent of Black Hills Corporation employees were "positively engaged" with the company. The company's overall workforce satisfaction ratings were above the industry mean and just below the highest nationally-ranked companies based on employee satisfaction.49



Over the next several years, Black Hills Corporation earned widespread recognition for investing in a healthy corporate culture and for supporting its workforce. In 2015, the Department of Defense named Black Hills Corporation one of 15 receipients of a "Secretary of Defense Employer Support Freedom Award," which recognized corporations that demonstrated an exemplary commitment to supporting employees who were veterans or members of their local National Guard or Reserve.⁵⁰ The following year, the company appeared on the Forbes list of America's Best Mid-Size Employers.⁵¹

Black Hills Corporation was not only good at *winning* awards; the company also instituted a new program that recognized employee excellence. Each year from 2011 forward, employees could nominate their peers for the "Chairman's Award." Emery and a group of leaders reviewed these nominations and selected a handful of team members who exemplified the company's vision, mission, and values. By demonstrating these qualities every day, winners of the Chairman's Award inspired all employees at Black Hills Corporation.

Black Hills Corporation employee Corev Virtue (right) poses with CEO Dave Emery and the national chairman of Employer Support of the Guard, Paul E. Mock, during a ceremony at the Pentagon in Washington, D.C. Virtue served as a sergeant in the South Dakota National Guard and nominated the company for the Secretary of Defense Employer Support Freedom Award in 2015.

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"Whether it's operations reliability, it's customer service, it's safety, it's environmental compliance, we have be top-quartile performing within the industry so that we can demonstrate that we can continue to go out and do the acquisitions that we've been successful at and will continue to do."

MARK LUX, VICE PRESIDENT OF POWER DELIVERY

Drawing on lessons learned from earlier deals like Cheyenne Light and Aquila, Black Hills Corporation made a series of small, diligently planned acquisitions across the Midwest. Meanwhile, corporate officers studied an attractive acquisition opportunity called SourceGas. Although similar in principle to other acquisitions, securing and integrating SourceGas would prove to be a very different experience for Black Hills Corporation. With its completion, however, the transaction would continue the company's evolution, this time on a larger scale than ever before.

CHAPTER FOURTEEN

GROWTH **THROUGH FOCUS**

White had lived through the tempestuous eras of diversification and deregulation. Mere survival "had been our mission pretty much all my career," he said.¹ But in the second decade of the 21st century, the new existential threat to Black Hills Corporation and many of its peers was consolidation.

According to one study, there had been 100 investor-owned utilities in the United States in 1999. As of November 2017, there were only 60.² This consolidation resulted in larger, better-capitalized utilities. In 1995, just 2 percent of electric utility companies were worth \$10 billion or more; two decades later, some 40 percent had reached that threshold.³ In this context, where survival would only come through growth, Black Hills Corporation had seized on opportunities to acquire two challenged utilities: Cheyenne Light, Fuel & Power and Aquila.

As the company successfully integrated these entities and grew, corporate leaders began to worry that with its expanded service territory, customer base, and workforce — not to mention more than four decades of increased dividends for BKH shareholders — Black Hills Corporation could become a target for acquisition.⁴

Per the old adage, the best defense was a good offense. "Dave Emery saw and recognized that if we wanted to survive as a company," White said, "we would need to continue to grow. The unregulated businesses had their limitations. Moving back towards utilities made sense from an investment perspective." Opportunities to buy utilities that offered a strategic fit were rare, and even when a combination seemed promising, a host of factors could make a deal impossible. Even when a transaction didn't work out, however, it could lead to other opportunities or insights. The failed bid for Northwestern, for example, had set the stage for Aquila. In the midst of the Aquila

deal, Black Hills Corporation had considered buying the









Facing uncertainty across the industry, prudent management and a utilitiesfocused strategy drove Black Hills Corporation's growth in annual revenues, employees, and customers between 2000 and 2018.

Intermountain Gas Company, an operation with some 300,000 natural gas customers spread over 75 communities in Idaho, but the opportunity disappeared when North

Dakota-based MDU Resources Group bought Intermountain for \$328 million in mid-2008.⁵ Each of these possible transactions helped build relationships with bankers and credit rating agencies that enabled the company to move more quickly the next time. Buying and integrating Aquila proved that Cheyenne Light was no fluke: Black Hills Corporation was nationally competitive and had set its sights on growth through acquisition.⁶

As it developed its utilities-focused strategy and mapped out a plan for continued growth, the company sought to maintain healthy balance sheets, boost its credit ratings, and produce consistently strong returns for shareholders. Shortly after Aquila, Black Hills Corporation started building the financial foundation for an additional, major acquisition.

According to Brian lverson, who served as treasurer between 2011 and 2014, "In the early 2000s, the whole utility sector had been downgraded in their debt ratings," and Black Hills Corporation was "on the bottom rung of investment grade," with a BBB- rating. The senior management team and the board pushed to strengthen the company's balance sheets to improve the company's standing with bankers and rating agencies.⁷ The company communicated regularly with shareholders, informing them of the steps it was taking to overcome challenges and produce dividends. These efforts required diligence coming off Aquila, when uncertainty about the deal and tempestuous commodities prices pushed the company's total shareholder returns to the lower end of Black Hills Corporation's industry peer group.⁸ These efforts paid off. In 2013, BKH rebounded and outperformed every other stock in the utilities sector.⁹

To further strengthen the company's financial position, Black Hills Corporation tightened up the company's banking group and reevaluated its debt. "When I started as treasurer," Iverson said, "we had 24 banks in our bank group. That was unmanageable." So his team worked to reduce this pool by half and searched for banking partners who seemed invested in the company's success. As it consolidated banking relationships, Black Hills Corporation noticed that, of all its partners, U.S. Bank seemed to manifest the most "genuine interest in our business and in helping us grow," and it became the lead on many of the company's projects.¹⁰

Balancing the books took additional care. By selling IPPs to finance Aquila, the company ensured that it "didn't auger ourselves into a hole financially," as Richard Kinzley said. "We didn't take on a lot of debt or issue a huge slug of equity." But the Great Recession had forced the company to borrow at very high rates.¹¹ Investing in new power generation capacity required additional financing and left Black Hills Corporation with comparatively higher electric rates than most of its peers.¹²

In an effort to manage costs for customers and prepare for further growth, the company sold minority interests in several of its electric plants. In 2009, it offered 23.5 percent of Wygen I to the Municipal Energy Agency of Nebraska.¹³ Over the course of 2009 and 2010, Black Hills Corporation sold 25 percent of Wygen III to MDU Resources Group and another 23 percent to an electric board that oversaw service to the city of Gillette.

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This meant that the company retained a 52 percent ownership of Wygen III, while its customers - MDU and Gillette — owned a combined 48 percent.¹⁴ Similarly, in 2015, the company announced the sale of a 49.9 percent interest in the two combined-cycle units built at the Pueblo Airport Generating Station to a group of energy investors.¹⁵ Contracts like these represented strategic partnerships that could help Black Hills Corporation control its energy assets and provide cash that allowed for the repayment of

Completed in 2008 and 2010, respectively, the Wygen II and Wygen III power plants represented the innovative ownership structures through which Black Hills Corporation achieved efficiencies, satisfied regulators, provided for communities, and created value for investors.

long-term debt. They also created efficiencies — especially in the case of partner utilities or municipalities — and provided minority partners with cost savings on construction, infrastructure, and operations.¹⁶

These moves allowed the company to incrementally improve its credit ratings. At the end of 2012, Moody's upgraded Black Hills Corporation's credit outlook from "stable" to "positive," and a few months later, Fitch moved the company's bond issuer default rating up to BBB, citing the company's efforts to produce "higher earnings with reduced debt and substantially lower interest expenses."¹⁷ The financial picture continued to improve. By March 2015, Black Hills Corporation had stabilized its debt-to-total capitalization ratio at 54 percent. In June, Fitch upgraded the company to BBB+. With these improvements in its financial position, the company was well-positioned for a major transaction.¹⁸

While it laid the groundwork for another large acquisition and evaluated entities that might complement Black Hills Corporation's geography, strategy, and competencies, the company carried out a series of smaller, regional purchases. Several of these were precipitated by the growing costs of regulatory compliance, which made it difficult for small municipal utilities to offer economical service. In September 2013, Black Hills Corporation absorbed 56 customers after taking over the municipal gas system in the small town of Agenda, Kansas. The following year, the citizens of Ankeny, Iowa offered the company a 15-year franchise on their gas service, which added 400 customers.¹⁹ Other acquisitions in 2014 included the gas utility assets of MGTC, Incorporated - an Anadarko subsidiary with 400 customers, 271 miles of transmission lines, and 135 miles of gas pipeline — and Energy West Wyoming, a gas utility with 6,700 customers in and around Cody.²⁰

Although these and several smaller acquisitions were less strenuous than massive integrations like Chevenne Light or Aquila, the company nonetheless had to carefully evaluate each acquisition from a regulatory, strategic, and customer relations standpoint.²¹ Linn Evans characterized the legwork involved with these acquisitions as an outgrowth of Black Hills Corporation's decision not to embrace deregulation more than a decade earlier. "We have been growing through acquisitions and buying territories that Maguoketa, Iowa. tend to continue to be growing." Unlike many players in the energy industry, Black Hills Corporation had been doing so since the mid-2000s. "Many utilities in the country aren't seeing the organic growth that we see in our midwest territories, including more use of electricity and gas."22 As growth opportunities presented themselves across the region, Black Hills Corporation had nearly continual opportunities to plan and execute utility integrations. The more the company grew in scale, it seemed, the better it became at increasing the scope of services it offered to customers.

Paying for the necessary infrastructure and upgrades that were often associated with acquisitions, including several large electric generation projects, led Black Hills Corporation to file a flurry of rate cases around 2015. Work on these cases stretched the regulatory team to its capacity, which opened the door to a few small mistakes that ended up costing additional time and money and "hurt our reputation in some regards," said Brian Iverson. These issues forced the company to restructure its approach to support its ambitious construction and acquisitions plans.²³

Black Hills Corporation encountered other issues during the process of integrating acquired companies. In the summer of 2012, for example, a customer in Laramie County, Wyoming called to ask why his bill showed a 2 percent franchise fee. It turned out that, while struggling to rectify the problems with Cheyenne Light's pre-acquisition billing



As the energy industry continued to consolidate into the 2010s, Black Hills Corporation acquired several relatively small gas networks, like this one in

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system, Black Hills Corporation had overlooked this charge and overbilled some 4,000 customers for over seven years to the tune of about \$1 million. The mistake garnered a public apology and a commitment by Black Hills Corporation to repay the customers with a monthly bill credit spread out over the course of about eight years. It also inspired another review of Cheyenne Light's billing system — a study that occurred nearly a decade after the acquisition had closed.²⁴

All of these lessons learned in the process of integrating other companies and their systems enhanced Black Hills Corporation's core competencies: providing safe, reliable electric and gas service while balancing the interests of shareholders and customers for the benefit of both. As Dave Emery and other corporate leaders looked to the future, they believed the company was ready to build on these strengths.



Black Hills Corporation's senior management team in 2017. Seated from left are Robert "Bob" Myers, Scott Buchholz, and Richard Kinzley. Standing from left are Linn Evans, Jennifer Landis, Dave Emery, and Brian Iverson.

A Synergistic Acquisition

In 2015, Black Hills Corporation recognized a major opportunity when a natural gas utility called SourceGas went up for sale. Unlike Aquila, which hit the radar during a series of confidential meetings, Black Hills Corporation had had its eye on SourceGas for years. Already working with investment bankers and credit agencies to lay the groundwork for another large acquisition, the company evaluated SourceGas alongside other utilities in New Mexico, Missouri, and elsewhere as the Aquila unification came to a close.²⁵ SourceGas, LLC was jointly owned by the hedge fund Alinda Capital Partners and a division of General Electric called GE Energy Financial Services. Hedge funds were not known for holding assets very long. Since SourceGas already abutted Black Hills Corporation's service territories in Wyoming, Colorado, and Nebraska, a deal looked both possible and attractive.

Representatives of Black Hills Corporation reached out to SourceGas around late 2010 and initially "got traction and thought we might be able to make something happen," Dave Emery said.²⁶ But Alinda and GE, which each owned 50 percent of SourceGas, "flip-flopped" about a sale over the course of about five years. Sometimes the conversation floundered over the price; other times it was an issue of poor timing. In 2013, GE publicly floated the idea of divesting its portion of SourceGas, which was then based in Golden, Colorado. GE, the Wall Street Journal reported, was exploring opportunities to streamline its banking enterprise and likely hoped to entice potential buyers with a public announcement.²⁷ Alinda, on the other hand, wanted the business to grow for a few years so that it would command a higher purchase price.²⁸

As this disagreement brewed, potential buyers — including Black Hills Corporation - were discouraged by the 50/50 nature of the deal. SourceGas was a strong company,



Black Hills Corporation grew up surrounded by the values and culture of western South Dakota. By the year 2005, however, the company had outgrown its headquarters on Ninth Street in Rapid City. As they evaluated options over the next few years, corporate leaders recognized the obstacles to remaining in Rapid City: travel was expensive, it was challenging to recruit talent to a rural region, and new customers and employees in faraway service territories sometimes struggled to relate to a company headquartered hundreds of miles away.

Some board members even suggested that the company build a new headquarters in Denver or Omaha. But, as Emery said, "the way you grow and thrive as a company is if your home community grows and thrives too. And that's been our business philosophy forever. The way we do business applied better in rural territories than large urban ones."

With this in mind, Black Hills Corporation decided to deepen its roots. In late 2015, the company broke ground on a new headquarters on Mount Rushmore Road just south of Rapid City. Named "Horizon Point," the building looked to the future but was firmly grounded in the company's past. Horizon Point faced the eastern horizon and the rising sun. Gazing out tall windows in the back, employees and visitors could view the western horizon of the Black Hills.

Horizon Point's campus was designed for 21st century business. An open concept facilitated community building and collaboration. The efficient building featured a cafe and flexible meeting spaces. An outdoor walking path gave employees a chance to meet wellness objectives or conduct a walking meeting as they brainstormed creative ways to best serve customers.

HORIZON POINT
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but Black Hills Corporation and other potential buyers were leery of the idea of partial ownership, which would make it much more difficult to manage and integrate, and to recognize merger synergies. GE ended up being "seriously disappointed with the offers they got," and never moved on a bid. In fact, Emery and his leadership team submitted a bid for 100 percent of SourceGas and told GE, "If you can convince your partner to sell, we'll buy the whole thing. If not, we're not interested in your half." GE, however, could not convince Alinda to sell.29

Reading this situation, Dave Emery and the leadership team at Black Hills Corporation decided to continue monitoring the situation and remained open to making the purchase. As time went on, GE and Alinda finally decided to jointly offer SourceGas for sale. They solicited bids and reached out to investment bankers who would then float the idea to potential buyers. Black Hills Corporation went through the full process and submitted a formal bid. JPMorgan Chase & Co., the bankers managing the sale process for GE and Alinda, reached out to Emery and his team to clarify the provisions of Black Hills Corporation's offer and to push for a higher price, citing strong competition.³⁰

On Friday evening, July 10, 2015, Black Hills Corporation's board engaged management in an earnest discussion of the potential deal. Convinced that the synergies were substantial - the deal harbored plenty of potential since many of SourceGas's service territories were adjacent to communities and within regulatory jurisdictions that Black Hills Corporation knew — they encouraged management to consider a slightly higher offer in order to bring GE and Alinda to the table. Management gave their consent. Emery remembered the ensuing negotiation as "a midnight kind of conversation with" GE during which he and his team presented the offer, but made clear that "it's only good for 24 hours, and it's contingent on our ability to announce a deal by Monday morning." 31

The bold move worked, and on July 12, 2015, Black Hills Corporation signed an agreement to purchase SourceGas for \$1.89 billion, including \$760 million in existing SourceGas debt. Credit Suisse provided a fully committed bridge loan to finance the balance of the purchase price. Later that year, Black Hills Corporation also grossed nearly \$554 million from equity unit and common stock offerings to retire the bridge loan with permanent financing. Early in 2016, the company completed another \$546 million debt offering, which was accompanied by \$250 million in 3-year notes to refinance debt it acquired from SourceGas as part of the deal.³²

In shareholder presentations, Emery and Kinzley described the complementary nature of the deal. Black Hills Corporation would be able to expand its footprint in Wyoming, Nebraska, and Colorado, which promised greater efficiencies for customers. It would also be able to expand into a new territory: Arkansas.

The SourceGas acquisition also offered an opportunity to explore a new customer choice program. Seeking to promote competition in the 1990s, some natural gas companies began allowing customers to choose among a handful of natural gas suppliers who

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competed with one another on the basis of price, while the utility or local distribution company agreed to deliver the gas and charge customers only for the cost of delivery. In the late 1990s, SourceGas's predecessor, Kinder Morgan, had launched one such initiative — called Choice Gas — in Fayetteville, Arkansas. its Nebraska and Wyoming service territories, and the program continued under SourceGas. Meanwhile, similar programs proliferated across the country, largely because the internet was reshaping the way customers selected the products they bought. By the end of 2016, in fact, nearly half of all U.S. states and the District of Columbia had inaugurated some kind of natural gas-customer choice program, including Wyoming and Nebraska.³³ Although Black Hills Corporation did not pursue new customer choice programs following the SourceGas acquisition, Choice Gas continued to operate in former SourceGas service territories, and Black Hills Corporation resolved to monitor the program's potential as the company developed new growth strategies.

Remarkably, Black Hills Corporation was able to close the SourceGas deal on February 12, 2016 — only seven months after the acquisition was first announced. This speedy process was the result of two long-running and parallel strategies that Black Hills Corporation had put to work. On one hand, the company had spent years earning the trust of regulators. On the other, Black Hills Corporation had such a deep well of experience with regulatory cases that it had developed a strong sense for which issues were likely to give regulators pause. The company's representatives came to the table prepared to address and mitigate those concerns. The company also demonstrated a clear desire to leverage the value of the deal for customers. Together, these strategies paid off, and regulators granted timely approvals for the deal.

Meanwhile, the company's experience with previous acquisitions set the stage for integration. This process, like those before it, would come with its own set of challenges. The

As it expanded into the former SourceGas territories. Black Hills Corporation consolidated its call centers. One was in Rapid City and the other, shown here, was in

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acquisition had been projected to increase Black Hills Corporation's debt, or leverage, ratio to a slightly higher, but still comfortable, 62 percent. Just after the deal however, ceiling tests for oil and gas brought about \$290 million in unexpected, non-cash write-offs, briefly pushing the company's leverage ratio to 69 percent.³⁴ Black Hills Corporation remained confident, however, that prudent financial management would continue to buoy its credit ratings over the long term.³⁵ And, despite relying more heavily on debt than it had for Aquila, the SourceGas deal was sound. After closing, credit agencies minimally reduced the company's rating from BBB+ to "BBB equivalent or better."³⁶

As the SourceGas deal moved forward, Black Hills Corporation focused on integrating the SourceGas' personnel and systems. After the acquisition, the company decided to close its call center in Lincoln, Nebraska, choosing to consolidate those operations in a former SourceGas call center in Fayetteville, Arkansas. Thereafter, Black Hills Corporation managed contacts with all customers across its service territories from

its two call centers in Fayetteville and Rapid City.³⁷ With the SourceGas acquisition, Black Hills Corporation also added a seventh collective bargaining agreement, and the company entered into negotiations with unionized employees in Wyoming, Nebraska, and Colorado.³⁸

These logistical issues aside, Black Hills Corporation understood from the outset that there would be fundamental differences between this deal and the other major acquisitions the company had undertaken since 2005. With Cheyenne Light and Aquila, Black Hills Corporation absorbed utility assets whose operations and personnel added to its existing businesses without creating a lot of redundancy. In contrast, the SourceGas deal entailed the purchase of an entire company, including all of its corporate functions. Accordingly, the deal was very synergistic and offered a major opportunity to reduce cost and increase efficiency by eliminating redundant administrative operations. This meant that many positions at SourceGas, especially at the executive level, were redundant and would be eliminated. Given this situation, communications with the SourceGas executive team were often strained.39



Wanting to show its commitment to local communities in its new service territories following the SourceGas acquisition, Black Hills Energy sponsored community priorities. This included promoting the idea that "natural gets it done," which fit well with the name of the Northwest Arkansas Naturals, a Minor League Baseball affiliate of the Kansas City Royals.

Unable to communicate directly with SourceGas employees until the effective date of the acquisition, the leadership team at Black Hills Corporation could not tell SourceGas employees in advance whether or not they had a future with Black Hills Energy. Black Hills Corporation recognized that this situation bred apprehension and tension. Delays would only exacerbate the situation. Believing it important to be as transparent with the

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rank-and-file SourceGas employees as possible, Dave Emery and Linn Evans toured several SourceGas locations to introduce themselves and start the work of building personal relationships. To communicate more effectively with SourceGas employees without running into conflicts with the SourceGas executive team, Black Hills Corporation launched a password-protected website intended for SourceGas and Black Hills Corporation employees. It included information and updates about the transition process, including factual updates about regulatory approvals. Black Hills Corporation's communications team also developed a unifying theme of "stronger together," which it used to help prepare employees for the integration of the two companies' cultures.⁴⁰ While not the open, transparent, two-way employee communication process Black Hills Corporation's leaders preferred, they understood that it was better than nothing.

Once the deal closed and Black Hills Corporation began to integrate its new employees, leadership more clearly identified some cultural differences. As a private equity-owned entity, SourceGas had clearly operated under a model that maximized short-term profits. "Safety and reliability and effective operations" were things that SourceGas "worked on and focused on," Ivan Vancas said, "but they were much more commercially oriented." As a result, safety had not been as strongly emphasized at SourceGas, and Black Hills Energy experienced a sharp uptick in safety incidents post-integration. Surveys also suggested that SourceGas employees had "far less confidence and trust in their senior management team as compared to Black Hills." Building confidence and getting employees to feel like part of the Black Hills Corporation family, along with reemphasizing safety and driving down the total case incident rate (TCIR), would prove to be an ongoing process.⁴¹

With the completion of the SourceGas acquisition, Black Hills Corporation once again found itself larger than ever before. The company served approximately I million gas and 200,000 electric customers spread across 800 communities in eight states. It owned 45,000 miles of natural gas transmission and distribution lines, a 9,000-mile electric transmission and distribution system, a bevy of gas storage and coal, oil, and natural gas production assets, and generating stations that could produce 1,086 MW of peak-demand energy. More than 2,800 employees were needed to run the business.⁴² In order to streamline these operations, the company restructured its utilities functions into two core parts: the Natural Gas Utilities Group and the Electric Utilities Group. This reorganization integrated the company's operations support services and allowed specialists in each area to be more agile and responsive to gas- or electric-specific needs, yet still be able to communicate and collaborate between groups as needed.⁴³



Jeff Sylvester, vice president of Black Hills Energy's Nebraska operations, provides an integration briefing to a team of legacy SourceGas employees. SourceGas executives had limited Black Hills Corporation's access during the transition, making it difficult to inform employees how the acquisition would affect their jobs.

UNIFYING THE BRAND



Informed by its acquisitions of Cheyenne Light, Aquila, and smaller properties, Black Hills Corporation had gotten better at unifying corporate cultures by 2015. As the company prepared to acquire SourceGas, however, it recognized the need to unify the company's brand for customers. After all, the company known since the 1980s as "Black Hills Corporation" included subsidiaries like Wyodak Resources, Black Hills As Horizon Point neared completion in 2017, the company chose to erect a sign reading "Black Hills Energy"—not "Black Hills Corporation"—outside the company's new headquarters to unify the brand.

Power, Cheyenne Light, Fuel & Power, and more. Employees donned different uniforms at each business and tended to identify with the company they served every day rather than a single, unified organization.

So, as Black Hills Corporation prepared for the SourceGas acquisition in 2015, the company started to rebrand its component parts, having each do business under the banner "Black Hills Energy" rather than their original name. Based upon past experiences and a desire to solidify the brand, Dave Emery directed the rebranding to be essentially completed by the end of 2016. To do so, the company changed signage and uniforms, as well as marketing and information materials. Unifying under this brand would help customers, investors, and regulators relate better to the company as a whole, all while reminding employees that they were part of a broader, multi-state team.



As Black Hills Corporation approached its 135th anniversary in 2018, it reflected on its deep roots in the middle of the United States as well as the rapid growth that had defined the previous decade and a half. Between 2005 and 2016, the company had acquired 23 utilities systems, which fed the utilities-focused growth strategy that had catapulted its value to more than \$6.7 billion.⁴⁴

Throughout its life, Black Hills Corporation had faced challenges ranging from the closure of a major customer like the Homestake Mine, competition from rural electric co-ops or government-funded hydroelectric power stations, fallout from periods of inflation or deregulation, as well as the looming possibility of game-changing technologies. Despite these hurdles, the company had remained viable due to one basic skill that had resonated across its history. As longtime Vice President of Governance and Corporate Secretary Roxann Basham put it, the company had "a knack for getting a focus and being diligent." This skill was combined with a deeply ingrained concern and attention for communities and customers and a desire to stand beside them as they bet on their individual and collective futures, whether they were panning for gold in the 19th century or creating a breakthrough discovery in the 21st.⁴⁵

With the closing of the SourceGas deal, Black Hills Corporation had 1.25 million natural gas and electric customers spread across eight states.

"This building is where our employees will come to work every day, but the purpose is focused on our mission to improve the lives of our customers with energy and our values, including providing superior customer service. Our customers are why we exist as a company. Serving them with valued, reliable and safe energy is what drives us."

DAVID EMERY, CHAIRMAN AND CEO

As Black Hills Corporation prepared itself for another major acquisition around 2014, it recognized that it had outgrown its Rapid City headquarters. As the company evaluated its options, a critical question arose: should Black Hills Corporation break with its heritage and relocate to a larger, urban center? As the company pondered this question, market forces continued to encourage consolidation across the energy industry, while political and regulatory unpredictability and the continued threat of a game-changing technology clouded the future. With 13 decades of experience to rely on, Black Hills Corporation looked to the horizon and sought to clear a path towards a stronger, brighter future.

CONCLUSION

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n a frigid Friday in January 2018, Linn Evans acted as the master of ceremonies at an event inside an impressive new structure situated high on the rolling prairie plateau above Rapid City. The Black Hills skyline, a familiar jagged cut of granite spires set alongside Black Elk Peak, loomed far to the west. That day, Black Hills

Employees, members of the media local supporters, and dignitaries lined the interior of Horizon Point for the new facility's dedication on January 5, 2018.

Corporation employees were joined by members of the state legislature, elected officials, and business leaders from around the region. They assembled on tall, cascading stone steps and a series of floor-level balconies overlooking the building's central atrium to celebrate the opening of "Horizon Point," the new, state-of-the art corporate headquarters of Black Hills Corporation, which was completed after several years of deliberate planning and construction.1

Tall and slender, with his hair swept neatly to one side, Evans started the meeting the way he always did: with a polite "thank you for joining us" and a brief safety talk. Black Hills Corporation, after all, had "a practice of placing [safety] first on the agenda of any gathering of two or more" people. He reminded the crowd how to safely exit the earth-toned cascades by using the handrails. And, he mentioned, ample emergency exits surrounded the space.²

Following his safety briefing, Evans began introducing a series of guest speakers. They included a representative for South Dakota Governor Dennis Daugaard, who had been forced to cancel his attendance after a heavy fog prevented him from flying; Rapid City

Mayor Steve Allender; and leadership of the Rapid City Economic Development Partnership and the Rapid City Area Chamber of Commerce. Each of these individuals spent a few minutes congratulating Black Hills Corporation on the successful completion of and move-in to Horizon Point (employees had already begun transitioning to their new work spaces starting in November 2017). Most thanked the company for its long and positive record of service to the local community and wished Black Hills Corporation a long and successful future in its new home.³ When they were done, Evans stood again to introduce his long-time colleague, Dave Emery, calling him "the inspiration" behind the building and the one who "provided the vision to get us to where we are today."4

Emery then stepped to the podium on the first floor of Horizon Point's atrium. He thanked the attendees and special guests and recognized the construction firms, architects, and project managers who made the Horizon Point project a success. He noted how, true to its commitments to supporting the local economy and modeling strong environmental stewardship, 27 of the 30 subcontractors on the project were from South Dakota, and all followed sustainable and environmentally friendly construction standards. presentation space. Indeed, Horizon Point, equipped with a state-of-the-art geothermal heating and cooling system, was estimated to be 40 percent more energy efficient than a standard office building of its size. Emery then launched into a discussion of how and why Black Hills Corporation chose to build Horizon Point in Rapid City.

The story captured the spirit of Black Hills Corporation as it has existed under Emery's leadership and many of his predecessors. The company had grown and changed dramatically in the last several decades, Emery said, and slowly outgrew its former headquarters in downtown Rapid City. As regional offices and customer service centers popped up in Colorado, Nebraska, Arkansas, and elsewhere, employees in Rapid City made do by working out of five different buildings, including leased spaces across town, using telephones and, later, video conferencing tools — to meet as needed. They got by, diligently executing the work that returned Black Hills Corporation to its roots and framed its mission around the utilities-focused, growth-oriented strategy that added more than a million new customers in less than a decade. By 2014, however, it became clear that if the company grew any more, as was its intention, it would need to rethink its base of operations.

As the company pondered this next step, some leaders floated the idea of relocating to a bigger city. After all, less than 6 percent of the company's 1.25 million customers were located in Rapid City. Moving to a place like Omaha or Denver, some executives and board



President and COO Linn Evans welcomed guests to the Horizon Point dedication ceremony. With a huge screen hung high overhead, the building's main lobby was designed to double as an amphitheater-style

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members posited, might make it easier to recruit employees, feel connected to the pulse of corporate America, and even save travel time associated with that final leg to Rapid City.⁵ Emery and others resisted these suggestions.

As Emery told the crowd: "We chose to build it here because we understood it was the best place to do so." The Black Hills was home, he said, and it was "important to choose a location that would keep us true to our roots and keep us close to the communities we serve," all while staying in a place that "reflect[ed] the values and character and diversity" of the people, communities, and institutions in Black Hills Corporation's home territories.⁶

Indeed, Horizon Point was, in many ways, the physical embodiment of the values that had driven Black Hills Corporation forward for 135 years. Designed with Emery's love for his company's long-time hometown in mind, the building reflected Black Hills Corporation's commitment to its customers and communities. Nine flags, representing the United States and the eight states Black Hills Corporation served, offered a reminder of the company's geographic scope.

Inside the building, a coffee shop and cafe offered employees a place to network with one another or hold business meetings, while group meeting spaces, and even two shuffleboard tables, encouraged them to unwind or brainstorm over a friendly conversation or competition. Much of the building favored an open concept design to encourage new collaborations and the cross-pollination of ideas. Only a small number of leaders had assigned offices. Most were on the east side of the building so that the majority of the employees' workstations would benefit from panoramic views of the Black Hills. A stateof-the-art security system further ensured employees' safety, controlling visitor access as a way to manage risks and counteract modern threats, while other technological elements enhanced available workspaces. Designers equipped meeting rooms with video conferencing and screen sharing tools. The space around co-working areas incorporated sound-making white noise to reduce distractions from nearby conversations. Together, all of these elements at Horizon Point would enable Black Hills Corporation to serve its customers and communities while meeting new challenges looming on the energy horizon.

Although a sense of excitement and optimism about Black Hills Corporation's future permeated the room as Dave Emery, Linn Evans, and the crowd dedicated Horizon Point that day, there were plenty of serious challenges on the way. Moving hundreds of local employees to a single new building would require a period of adjustment, and making this new space accommodate the learning and working styles of so many people, many of whom had spent their careers in private offices, would take time.

The energy industry, meanwhile, continued to be dominated by a powerful tide of consolidation. Recognizing that it would have to grow its way through this era, Black Hills Corporation set an aggressive eye on meeting customer needs, helping communities grow, and identifying investment opportunities. Advancements in renewable energy

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technologies, the evolution of customer preferences, and changing regulatory regimes continued to push Black Hills Corporation to assess the changing landscape while focusing on what had made the company so strong.

If they were looking for reassurance in the face of uncertainty, the staff at Black Hills Corporation could draw from the company's deep history. For 135 years, employees just like them had adapted and evolved to meet the challenges of a given historical moment while remaining true to their company's commitment to earning fair and strong returns for shareholders, providing safe and reliable service for customers, and standing with communities through good times and disasters as they bravely faced the future.

As Dave Emery put it, the company's strength was in its unity. The dedication of Horizon Point, he said, helped cement the idea that "through this building and our personal commitment" to the company's traditions and values, "we are one Black Hills [Corporation]."⁷

Indeed, for all its high-tech facilities and deeply entrenched symbolism, Horizon Point was only a shell — a concrete, iron, and glass vehicle — for the thing that truly comprised Black Hills Corporation and allowed it to evolve through the ups and downs of many generations: its people. The employees of Black Hills Corporation did not just *serve* communities. After 135 years together, they *were* a community — over 2,800 strong, from all kinds of families, faiths, backgrounds, and interests. They were united by common goals and values that had defined the company's mission since 1883.

Some worked to deliver that same enigmatic spark that once bewildered the townspeople of Deadwood. Others sent invisible gas through a network of pipelines that had been built along paths first laid in Kansas nearly a century earlier. Sometimes the people of Black Hills Corporation would spring into action, donning hardhats and orange or green vests as they repaired lines through blizzard and bluster; replanted trees along the devastated path of a tornado; or passed out fresh supplies to local residents whose homes and businesses were engorged with floodwater and debris.

Most often, however, the people of Black Hills Corporation were there, silent in the background. They knew that across the many communities Black Hills Corporation serviced, whenever a lamp illuminated a little league baseball field, a respirator pumped air with life-saving rhythm into a patient's chest, or a bright blue flame heated a home, they had made it possible. They were ready to serve, acknowledged only by the quiet satisfaction that they had helped improve life with energy.



Surrounded by state legislators, civic leaders, and the leadership team at Black Hills Corporation, Dave Emery cut the ribbon ceremonially opening Horizon Point for business.

information on the history of SourceGas. Terry Hill and his team, along with Randy Leinen, Matt Parette, and Darrell McNabb helped us track down images and artifacts used in the research or as photographs in the book, while Wyodak's Jim Williams gave Eric Abrahamson a tour of the mine and provided many documents and photographs capturing the history of that institution.

Also at Black Hills Corporation, Karen Delicate and Rachel Pfeifle scheduled interviews with a variety of leaders from across the company, all of whom gave extensive and insightful perspectives about the company and its history. They were: Roxann Basham, Dale Clement, Don Dubej, Dave Emery, Jim Emery, Linn Evans, Steve Helmers, John Howard, Everett Hoyt, Brian Iverson, Dale Jahr, Kay Jorgensen, Richard Kinzley, Charlie & Irene Klueber, Dan Landguth, Jennifer Landis, Larry Likewise, George Locke, Mark Lux, Jim Mattern, Bob Myers, Tom Ohlmacher, Joe and Vicki Rovere, John Schunneman, Mark Thies, Ivan Vancas, Stewart Wevik, Kyle White, and Jim Williams. Many of these folks also read and commented on drafts of the manuscript. Lynn Porter, Tori Campbell, Penny Schild, Joel Hart, and Kelsey Notstad also either read drafts, reviewed galleys, or helped us manage the process of providing copies for review and incorporating feedback.

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A series of corporate histories helped us understand the Black Hills Corporation story, as well as that of the three major companies Black Hills Corporation has recently acquired. A 1966 history of Black Hills Corporation, as well as 1989's *A Century of Light* by R. E. "Dint" Furois, provided considerable background on the company's early years. Several

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Many thanks to all. We could not have done it without you.

— Eric John Abrahamson and Eric Steven Zimmer

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7. W. Bernard Carlson, Innovation as a Social Process: Elihu Thomson and the Rise of General Electric, 1870-1890 (Cambridge: Cambridge University Press, 1991), 9–10.

8. Black Hills Daily Times, January 1, 1884, 3.

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13. Ruth Anne Stymiest, Centennial: An Illustrated History, 1885–1985 (Rapid City, SD: South Dakota School of Mines & Technology, 1985),

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15. Nye, Electrifying America, 6.

16. "The Light Question," Black Hills Journal, March 26, 1886, 1.

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4. Dustin D. Floyd, "The Franklins: The Family and The Legacy," Deadwood Magazine (October 2006).

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6. Ibid., K2.

7. The company was purchased from A.A. Moodie, Chambers Kellar, R.H. Driscoll, and T.D. Murrin. "History of BHP&," n.d., typescript in Dream/Reality history file, Black Hills Corporation Archive.

8. Consolidated bought the Sturgis company from William Bartlett, Harry Phillips and Sylvester Allison.

9. Consolidated Power and Light Company of South Dakota, "Data Book," K4, H3. In fact, uncollectable accounts amounted to less than two cents on every \$10 of gross revenue between 1910 and 1915. 10. lbid., B3.

11. Ibid., H5.

12. "In the matter of the Development of the Hydroelectric power plant by the Dakota Power Company, on Rapid River, in Pennington County, South Dakota," Office of the State Engineer of the State of South Dakota, Water Division No. 2, in Consolidated Power and Light Company, "Data Book," tab UV.

13. George B. Mansfield, "Reminiscences of Early Days in the Black Hills: Rapid City, 1883–1886," n.d., manuscript, Black Hills Corporation Archive.

14. Ibid.

15. Ibid.

16. "George Mansfield," profile taken from the Lamplighter (June 1948), reproduced in "Black Hills Power and Light Company: A Dream in the 1880's to a reality in the 1960's," 29-30.

17. "The Dakota Power Company," typescript.

18. According to the introduction to the *Lamplighter* profile of Mansfield, Dakota Power was organized in 1906. A quote from Mansfield says it was founded in February 1907. See "The Dakota Power Company." See also "Black Hills Power and Light Company: A Dream in the 1880's to a reality in the 1960's," 29. For information on Haines see Harry K. Hartley, "Recollections," n.d., typescript in Black Hills Corporation Archive, 2.

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22. "The Dakota Power Company," 2.

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30. Hartley, "Recollections," 2.

31. Henry Oestreich, "Recollections," n.d., typescript in Black Hills Corporation Archive, I.

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33. "Black Hills Power and Light Company: A Dream in the 1880's to a reality in the 1960's," 16.

34. "The Dakota Power Company," 3.

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37. J.O. Kammerman, "Electric Power Survey of South Dakota," Black Hills Engineer 20, no. 1 (January 1932): 22.

38. Gary M. Walton and Hugh Rockoff, History of the American Economy (Fort Worth, TX: Dryden Press, 1998), 382.

39. Cowan, More Work for Mother, 94.

40. Hirsh, Technology and Transformation, 30.

41. Nye, Electrifying America, 300.

42. See the story of R. N. Rounds in Kadoka in Paula M. Nelson, The Prairie Winnows Out Its Own: The West River Country of South Dakota in the Years of Depression and Dust (lowa City, IA: University of lowa Press, 1996), 67-71.

43. "Rapid Strides Made in S.D. Development During 1924," Sioux Falls Argus Leader, January 1, 1925, 2.

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45. Hirsh, Technology and Transformation, 24

46. The Tru-Webber & Company and the Paul C. Dodge & Company were the bankers who bought Dakota Power Company, and the investment group in Philadelphia was Day & Zimmerman, Inc. The General Public Utilities Company bought the business in 1927. See "The Dakota Power Company," 3; "Black Hills Power and Light Company: A Dream in the 1880's to a reality in the 1960's," 4. 47. See "Black Hills Power and Light Company: A Dream in the 1880's to a reality in the 1960's," 4.

48. Jane Mobley, Power: The Story of Missouri Public Service (Kansas City, MO: Missouri Public Service, 1992), 40.

49. Calvin Coolidge, "Inaugural Address," March 4, 1925, accessed June 4, 2008, http://www.bartleby.com/124/pres47.html. 50. Leonard DeGraaf, "Corporate Liberalism and Electric Power System Planning in the 1920s, Business History Review 64:1 (Spring 1990), 1-31.

51. "J.B. French" profile from notes written by Mr. French in September 1966 in "Black Hills Power and Light Company: A Dream in the 1880's to a reality in the 1960's," 30-31.

52. Ibid.

53. Ibid.

54. In 1930, the population of the West River counties in South Dakota (excluding Rapid City and Sturgis) was 140,366. By 1940, it had dropped to 114,416. Over the next 50 years, as Paula Nelson points out, the population of these rural counties rose by only 586. See Nelson, Prairie Winnows, 174-175.

55. Mildred Fielder, The Treasure of Homestake Gold (Aberdeen, SD: North Plains Press, 1970), 306, 308-309.

56. lbid., 310.

57. Cited in David C. Coyle, *Electric Power on the Farm: The Story of* Electricity, its Usefulness on Farms, and the Movement to Electrify Rural America (Washington, D.C.: Rural Electrification Administration, 1036).

58. Rebecca R. Wise, ed., Rural Electric Fact Book (Washington, DC: National Rural Electric Cooperative Association, 1965).

59. Nye, Electrifying America, 314.

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61. Thomas P. Hughes, American Genesis: A Century of Invention and Technological Enthusiasm (New York: Penguin Books, 1989), 226–243. See also Mobley, Power: The Story of Missouri Public Service, 28.

62. Hartley, "Recollections," 4.

63. Hirsh, Technology and Transformation, 24.

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I. "Program to Become Operating Firm Pushed by Community Power," Wall Street Journal, August 22, 1941.

2. Furois, Century of Light, 25.

3. Hartley, "Recollections," 5.

4. Black Hills Power & Light Company, 1943 Annual Report, 9. See also "Take Over Dakota Power Properties," Rapid City Journal, August 28, 1941, 7.

5. According to its articles of incorporation, the new company was organized "for the purpose of generating, transmitting and distributing electricity within the State of South Dakota and elsewhere." It was created specifically to acquire "the South Dakota properties, assets and business of General Public Utilities, based in Florida, and Dakota Power Company." See Black Hills Corporation, "Minute Books," vol. 1, Aug. 27, 1941, 5, Black Hills Corporation Archive. 6. lbid., "Sept. 2, 1941."

7. Beala B. Neel worked for many years with the General Public Utilities Company in Arizona, Missouri and Texas before transferring to South Dakota in 1934 to serve as auditor of Dakota Power Company. See Black Hills Power & Light, Press Release, April 15, 1954.

8. To finance the deal, Black Hills Power & Light used 56 percent debt, 24 percent preferred stock, and 20 percent common equity. See Duff and Phelps, Inc., "Report - Black Hills Power and Light Company," Aug. 17, 1962 in box F72 (Warehouse-Mezzanine), bin 1145-003-001 (Finance), Black Hills Corporation Archive.

9. Black Hills Power & Light Company, Indenture of Mortgage and *Deed of Trust*, Sept. 1, 1941, 9–41.

10. "Tribute Paid French for His Role in Black Hills Power Growth," Gate City Guide, July 27, 1961.

II. "Minutes," Board of Directors, Black Hills Power & Light, December 8, 1941, Black Hills Corporation Archive.

12. J.B. French, "To the Stockholders of Black Hills Power and Light Company," August 16, 1945; Furois, Century of Light, 28.

13. Mary (Simpson) Jackson interviewed by Eric John Abrahamson, June 12, 2008. See also Lamplighter 1, no. 1 (June 1948): 10. 14. "Minutes," Board of Directors, Black Hills Power & Light, February 16 and March 3, 1942, Black Hills Corporation Archive. 15. Black Hills Power & Light Company, Press Release, June 8, 1953. 16. "Hills Army Depot to Close," Rapid City Daily Journal, April 24, 1964.

17. Black Hills Power & Light Company, 1950 Annual Report, 18. 18. Furois, *Century of Light*, 26.

19. "Bjorge Testifies in Hearing on War Shutdown," Black Hills Weekly, February 25, 1953.

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Annual Report, 18. 26. Black Hills Power & Light Company, 1944 Annual Report, 2.

27. French, "To the Stockholders," August 16, 1945. 28. Ibid.

29. By the end of 1947, Homestake was back to only 70 percent of its prewar employment levels. Black Hills Power & Light Company, 1947 Annual Report, 3.

30. Black Hills Power & Light Company, 1947 Annual Report, 3. 31. Black Hills Power & Light Company, 1950 Annual Report, 18.

32. Black Hills Power & Light Company, 1947 Annual Report, 2-3. 33. French, "To the Stockholders," May 20, 1950.

34. Black Hills Power & Light Company, 1950 Annual Report, 19.

35. Harold H. Young, "Company Operates in Thriving Diversified Territory: Black Hills Power & Light Co.," Investment Dealer's Digest. February 23, 1953, 1.

36. French, "To the Stockholders," November 15, 1946.

37. Black Hills Power & Light Company, 1948 Annual Report, 14. Journal, Nov. 3, 1953. 38. Black Hills Power & Light Company, Press Release, June 8, 1953. 6. French, "To the Stockholders," May 19, 1955, 2. See also Black Hills Power & Light Company, 1948 Annual Report, 14. 7. French, "To the Stockholders," Aug. 19, 1955, 2. 39. Black Hills Power & Light Company, 1947 Annual Report, 2. See 8. "Atomic Energy for REA's Under Study," Rapid City Journal, July also: Black Hills Power & Light Company, 1948 Annual Report, 15. 40. Black Hills Power & Light Company, Press Release, June 8, 1953. 30, 1954. 9. "Power Committee Named by Governor," Rapid City Daily Journal, 41. Black Hills Power & Light Company, 1948 Annual Report, 14. 42. Birdie Arnold, "Ed's Our Boy," Right Down Our Alley (Summer July 2, 1955. 10. "Freiberg Offers Services on Power for Plant," Rapid City Daily 1950): 16. Journal, February 18, 1959.

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45. "Minutes," Board of Directors, Black Hills Power & Light, July 19, 1954.

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47. Duff and Phelps, Inc., "Report-Black Hills Power and Light Company."

48. French, "To the Stockholders," Aug. 20, 1954, 2.

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50. Black Hills Power & Light Company, Press Release, June 23, 1955; Duff and Phelps, Inc., "Report - Black Hills Power and Light Company."

51. Roger Simpson, telephone interview by Abrahamson, June 6, 2008.

52. Black Hills Power & Light Company, Press Release, January 22, 1953.

53. Black Hills Power & Light Company, Press Release, April 17, 1957. See also French, "To the Stockholders," November 24, 1950.

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55. "Neil Simpson Community Chest President," Rapid City Daily Journal, July 25, 1955.

56. "Mrs. Simpson New School Board Prexy," Rapid City Daily Journal, July 13, 1955.

57. "Jabs and Bottles," Rapid City Daily Journal, September 30, 1957.

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3. French, "To the Stockholders," May 20, 1950.

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5. "French Outlines Power Proposal Benefitting Hills," Rapid City

II. "Herseth Considering Public Power to Run South Dakota Cement Plant," Rapid City Daily Journal, January 19, 1959. See also Neil G. Simpson, "To the Stockholders of Black Hills Power and Light Company," February 25, 1959, 2.

12. "Herseth Names Two to Cement Plant Board: Refuses Davenport's Resignation," Rapid City Daily Journal, February 13, 1959.

13. "Davenport Urges Politics Be Kept Out of Cement Plant," Rapid City Daily Journal, November 4, 1959.

14. "Simpson Defends Power Rates at Cement Plant," Rapid City Daily Journal, January 21, 1959.

15. "BHP&L Breaks Ground for Plant," Rapid City Daily Journal, April 30, 1959.

16. "Crouch Replies to Simpson in Lions Address," Rapid City Daily Journal, January 5, 1960, 3.

17. "Simpson Urges Interest in Political Affairs," Rapid City Daily Journal, February 1960.

18. lbid.

19. Simpson, "To the Stockholders," November 23, 1960, I. See also Furois, Century of Light, 67-68.

20. In 1955 the members of Rushmore G & T Electric Cooperative, Inc. included West River Electric Association (Wall), West Central Electric Cooperative (Murdo), La Creek Electric Association (Martin), Butte Electric Cooperative (Newell), Black Hills Electric Cooperative (Custer), and Tri County Electric Association (Sundance, WY).

21. Furois, Century of Light, 68.

22. In 1960, for example, rural electrics and Black Hills Power & Light were pitted against one another in an effort to get county officials to grant rights-of-way for electric lines. The providers wanted access for all. The counties resisted the idea of a clutter of power lines running down the road. See for example: "County Rejects Utility Blanket Easement Bids," Sturgis Tribune, October 6, 1960.

23. Black Hills Power & Light Company, 1943 Annual Report, 2.

24. The purchase price was \$145,000. J. B. French, "To the Stockholders," November 15, 1946.

25. Furois, Century of Light, 48; Black Hills Power & Light Company, 1960 Annual Report, 3.

26. See display ad titled "Notice" in the Hot Springs Star, July 21, 1060.

27. Duff and Phelps, Inc., "Report-Black Hills Power and Light Company," Aug. 17, 1962, 3. See also: "BHP&L Buys Central Electric in Hot Springs," Rapid City Daily Journal, July 21, 1960.

28. "The Story of Ten Little Free Workers," Black Hills Power & Light Company, 1949 Annual Report, 20.

29. "Black Hills Power and Light May Be Unionized," Rapid City Daily Journal, April 6, 1955.

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36. Robert T. Bower, Television and the Public (New York: Holt, Rinehart and Winston, 1973), 29, 63, 75.

37. "It's Time to Enroll in Cooking School," advertisement, Sturgis Tribune, July 1, 1964.

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39. "BHP&L Co. Plans to Build New Plant," *Edgemont Tribune*, April 16, 1959.

40. "More Power To 'Em," Rapid City Daily Journal, April 29, 1959.

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43. Duff and Phelps, Inc., "Report-Black Hills Power and Light Company," 3.

44. Black Hills Power & Light Company, Press Release, February 10, 1958.

45. G. Leslie Fabian, "Black Hills Power & Light Co.," Investment Dealer's Digest, Oct. 26, 1959.

46. Duff and Phelps, Inc., "Report-Black Hills Power and Light Company," 3.

47. lbid.

48. Joe Rovere interviewed by Abrahamson, December 5, 2007. 49. Black Hills Power & Light Company, Press Release, January 12,

1954.

50. The South Dakota School of Mines became the South Dakota School of Mines & Technology by an act of the South Dakota Legislature which was signed by Governor Sharpe in February 1943. Ruth Anne Stymiest, Centennial: An Illustrated History, 1885–1985 (Rapid City, SD: South Dakota School of Mines & Technology, 1985), 86

51. Press Release, Black Hills Power & Light Company, January 22, 1953.

52. Press Release, Black Hills Power & Light Company January 12, 1954.

53. Joe Rovere interviewed by Abrahamson, December 5, 2007. See also: "Asheim Bids for Seat on City Council," Rapid City Daily Journal, March 13, 1962.

54. Simpson, "To the Stockholders," May 25, 1961, I.

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57. "Franchise Voted Down," Hot Springs Star, September 3, 1964.

58. "Thanks Folks," advertisement, Hot Springs Star, September 3, 1964.

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62. Furois, Century of Light," 69-70.

63. "Hills Army Depot to Close," Rapid City Daily Journal, April 24, 1964.

64. Simpson, "Presentation Before the New York Society of Security 2. Daniel Landguth interviewed by Abrahamson, Dececember 20, Analysts," December 29, 1965. 2007. 65. "Stock Options Conflict with Public Utility's Duties, FPC Rules," 3. George Locke interviewed by Abrahamson, January 8, 2008. Wall Street Journal, July 1, 1964. 4. Black Hills Power & Light Company, 1971 Annual Report, 3. 66. "Electric Power Territorial Dispute is Hot Item," Rapid City Daily 5. "BHP&L Annual Report Shows Flood Effects," Black Hills Press, Journal, January 7, 1969. February 3, 1973. 67. "REA Territorial Bills Hit Strong Opposition," Rapid City Daily 6. "Construction Begins on New Power Plant," Casper Star, January Journal, February 21, 1961, and "Beaten REA Bill Fails to Win Revival 13, 1974. Support," Rapid City Daily Journal, February 24, 1961. 7. Locke interviewed by Abrahamson, January 8, 2008. 68. Furois, *Century of Light*, 70. 8. "First Phase of Power Project Near Completion," Rapid City 69. 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50. "BHP&L to Implement Fuel Adjustment Charge," Rapid City Journal, July 25, 1977, 3.

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EXPANDING THE ENERGY HORIZON

Chapter Eight

I. In the short term, FERC's open access order brought a new twist to the complicated relationship between Black Hills Corporation and the region's cooperative electric companies. According to the company, under existing contracts the cooperatives were paying "less than their fully allocated cost for the use of [the company's] transmission system." Black Hills Power received a "just and reasonable rate" under a separate revenue calculation that provided revenue credits. Black Hills Power had to seek approval from FERC to continue this system. Black Hills Corporation, *1998 Annual 10K*.
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