# Producing Power for the Generations

1936-2010



Written by: Johanna Hanneman

# **Dedication**

This book is dedicated to all of the employees and Commissioners who devoted their careers to providing energy and heat to the citizens of Hutchinson and beyond. Without their zeal for providing exemplary service, residents and businesses alike would have not been able to enjoy the innumerable benefits that electricity and natural gas has bestowed upon the community. The cumulative actions of Utilities' personnel has propelled HUC to receiving recognition as being among the very best utilities in the nation.

# Acknowledgements

Herein is the story of how a modest plant was transformed into the prominent Hutchinson Utilities. Within its extensive history, there were countless memorable events that required the first-hand experience of individuals. I'm deeply grateful to those persons who consented to interviews and recounted various happenings that for some happened many decades ago. Without their aid and providing bountiful amounts of information, this book would have not been possible. Therefore, I would like to thank the following individuals: Randy Blake, Jim Dahl, Ryan Ellenson, Jon Guthmiller, Orville and Harriet Kuiken, Mike Kumm, Ivan Larson, John Webster, Butch Wentworth, and Elsa Young. I would also like to thank the many other Utilities' personnel who answered inquiries and allowed me to tag along as they labored on projects.

I am deeply appreciative to Lin Madson for her assistance in compiling material and patience in editing this piece. Your guidance was indispensible to me.

I would also like to extend a note of gratitude to the McLeod County Historical Society and the Hutchinson Leader for providing me full access to their archives. This freedom allowed me to gather wonderful primary sources that added more life and depth to the history piece.

What follows is a remembrance of what the Hutchinson Utilities has done throughout its 74 years of existence and serves as a template of what the Utilities will do as it charges into the future.

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# **An Introduction**

 $^ullet$  or the past 74 years, Hutchinson Utilities (formerly known as the Light & Power Plant of ■ Hutchinson) has been a state-wide mover and shaker in the realm of utilities, from the creation of a natural gas division to the purchase of the LM6000. The Utilities has continued to provide its services to large industrial consumers, such as Minnesota Mining and Manufacturing, Inc. (more popularly known as 3M) and Hutchinson Technology Incorporated, commercial users, and to thousands of residential customers just in the city alone. In 1936, the town embarked on a new path with the creation of the Hutchinson Municipal Electric Plant. Since its inception, Hutchinson Utilities has been at the forefront in all matters of electricity and starting in 1960, they entered the natural gas sector as well. Holding steadfast to its mission, the Utilities and its Commission have never strayed far from the ideals borne of the men who first conceived the idea of a locally-owned power plant. This is evident in the Commission's current-day mission statement which declares, "The Hutchinson Utilities Commission will provide economical, reliable electric and natural gas service within our territory and the Midwest, while contributing to the economic vitality of the City of Hutchinson and our customers." The Utilities has been an integral component of the Hutchinson community and will continue so into the indefinite future. It has persisted to provide reliable and inexpensive electric services; rates are not much more than what they were prior to World War II. Furthermore, the Utilities has even been referred to as "one of the best things that ever happened to Hutchinson." In order to cultivate a better understanding of the Hutchinson Utilities Commission and how it functions today, one must go back to discover the birth of the Municipal Electric Utility.

# 1. The First Days of Electricity

Before the Municipal Electric Plant served customers of Hutchinson, electricity was initially furnished by a local corporation at the turn of the 20<sup>th</sup> century. A headline from the Hutchinson Leader declared "Light at Last" would be coming to the community before Christmas and further announced that, "Main Street is to be lighted at least enough more so that a stranger getting off from a train at night will be able to find the town without a guide." Service began when a group of local men formed a company, the Hutchinson Lighting & Manufacturing Co., which was incorporated with \$25,000 worth of capital stock. The village council granted permission to these men to set poles, string wire, and to start constructing the electric plant next to the water pumping station along Main Street, lying north of the bridge. City Iron Works of Minneapolis was awarded the contract for furnishing the company with electrical machinery, steam boiler, engine and street wiring. It was only supposed to take a mere 10 weeks to complete the plant. Successful, the corporation was able to bring light to the community before Christmas Day. A 60-kilowatt dynamo (which had a capacity of lighting at least 1,200 lights) furnished the community's first supply of electricity on December 20, 1900. It began as a primitive utility, with only 80 customers that were serviced with electricity; its modest operations lit 800 private lights, two private arc lights, four on Main Street, and 32 candlepower incandescent street lights. Because the Hutchinson Company did not have an adequate supply of energy, light bulbs were only powered to emit a glow until midnight.

The following discount will be allowed on bills on current coasumption, only if paid on or before the 10th of the month  Bills over \$2.50 per month 5 per cent Bills over 5.00 per month 10 per cent Bills over 7.50 per month 15 per cent Bills over 10.00 per month 20 per cent Churches 10 per cent extra discount Meter rent 15 cents per month	Hutchinson, Minn.,  M. J. J. J. C. J. HUTCHINSON LIGHTING & MANUFACTURING CO., DR. THOS. PITTS. MANAGER
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When making payment in cash, bring bill When making temittance by check, detack	l and attached stub with you and retain this bill, mailing stub with check

A bill for \$1.78 from the Hutchinson Lighting and Manufacturing Company.

In 1915, the men of Hutchinson Lighting & Manufacturing Company sold their interests to Northwest Light & Power Co. and only nine years later, Northern States Power Company (NSP) assumed the role of electricity provider for Hutchinson.

# 2. A New Beginning

During the depths of the Great Depression, mounting discontentment with Northern States Power Company (and its mediocre level of supplied power) grew within the town. Citizens of Hutchinson attempted to purchase the plant in 1932; however, officials for Northern States Power (NSP) argued that the city did not have the option to purchase their distribution system until 1935. After the initial rejection, a special election was called by the City Council in the following months. Yet, just five days before the scheduled election, a petition signed by 100 individuals requesting that the special election be called off was presented to the Council; Council members complied. ii Although the City Council's attempts were thwarted, many people increasingly became agitated and dissatisfied with NSP's poor quality of service. Elsa Young, the daughter of R.W. Dahl discussed her dad's annoyance with the pitiful supply of power; "Dad bought my mother a fine, new electric stove. The darn thing didn't generate enough electricity to run the stove. We had to get a gas stove instead." About 30 other individuals were provoked into action due to their frustrations with NSP. They were soon on the hunt to find a more suitable alternative for their growing town. After surveying 28 other communities and their municipal power plants, the men were enticed by the bountiful benefits a municipal utility would bring to their community. Another fundamental reason that these men desired a municipal was that they wanted to encourage growth in Hutchinson through attracting industries to the town, particularly the company that is now commonly referred to as 3M. Minnesota Mining and Manufacturing had originally wanted to build a plant in the nearby community of Litchfield because it owned a municipal light plant and had a railroad line that carved through the town. Some of the Hutchinson men, including Mayor Sheppard and R.W. Dahl, journeyed to St. Paul to meet with representatives of 3M to assure them that the Hutchinson Municipal plant could supply all the power that they would ever need. A partnership was soon born between the town and 3M; it helped to propel the municipal issue to the forefront of Hutchinson news. The quest for Hutchinson's own cooperative took approximately three arduous years. At the outset, appeals were made both to the City Council and the Hutchinson Leader.

Early in 1935 a predominant sentiment grew among the citizens of Hutchinson; it was a longing for the establishment of a municipal plant to provide the town with another source of income in addition to property taxes to help support the growing community and lessen the debt that was plaguing the city. At the time the Water Department was seeing red, parking meters were absent, and a municipal liquor store was nonexistent. In spite of these hardships, an exception in the agreement between NSP and Hutchinson allowed for the citizens to take new action. Unlike the failed attempt of 1932, the original agreement specified that the city could purchase the distribution system starting in 1935, even though the company's franchise was not to expire until 1942. Hence, significant effort was put forth by many individuals to help educate the Hutchinson populace on the benefits of a community-owned utility in hopes that the dream of a city municipality would be realized. With the support of the Leader's publisher, Frank Bargen, R.W. Dahl and many other persons utilized the power of the press through writing various propaganda pieces, which were featured in the newspaper. One such example could be found in the March 8, 1935 edition, when the Leader published a letter signed by the members

of the Municipal Plant Committee: John Kennedy, chairman; E.C. Ditlevson, treasurer; R.W. Dahl, secretary. The letter reasoned with the public, stating,

At the present time Hutchinson must depend entirely on income derived from taxes. Hutchinson must have some new source of income. Hutchinson is forced to earn money. To earn money we must own some property with which to produce income. Hutchinson proposes to go about the business of acquiring and operating a Municipal Light and Power Plant. vi

Operating a municipal utility was (and still is) deemed as advantageous because it was owned by the city it served. Its basal existence was to provide a public service to both residents and businesses,

not seek a profit. The rates and services were to be governed by the municipality itself, through an elected Utility Commission, who were citizens of the community. The municipal utility was to operate solely for the public interest and not for the benefit of stockholders' or other investors' wallets. Support was amassed after the people of Hutchinson were enlightened, as is demonstrated in an ad presented by the Municipal Plant Committee: "75% of the consumers have signed Agreements to purchase electricity from the Municipal Plant. We the

"We urge you to vote Yes on March 26." Hutchinson Leader, 1935

This was a message that advocated the proposal to build a municipal plant.

undersigned city officials of Hutchinson will greatly benefit by having a home owned municipal light and power system." viii

However, the path to establishing a local municipality was questioned and did meet some resistance within the community. NSP attempted to launch an assault on the notion of Hutchinson having its own municipal plant by trying to sway public opinion; representatives of NSP authored essays that were published in the Leader. Hutchinson's residents were bombarded by opposing propaganda through the mails just prior to the election. Some antagonists of the municipal took an even more personal and desperate approach in their attempted efforts to intimidate the opposition. R.W. Dahl was the recipient of an anonymous letter that threatened him to cease and desist or else dreadful things would happen to him. One of Dahl's children, Elsa Young, explained her father's reaction to the incident, "He (Dahl) said that anybody that was chicken enough to not sign a letter was not worth paying any attention to." Letters such as this and other warnings went unheeded by community leaders and a vast majority of the citizens as they defiantly moved forward with their municipal plans.

March 26, 1935 became a monumental date. Due to the outstanding results of the special election that took place on that fateful day, the Municipal Electric Light plant was established. In a near-record vote, 1,187 citizens authorized the establishment of a new generating plant and distribution system through a bond issue of \$250,000 to pay for the construction. Only 128 voters dissented. Despite the opposition's best efforts, the plant and bonds were given an overwhelming nine to one endorsement by the community. This bond would be the only Utility bond issue that was ever voted on by the taxpayers. To reiterate, this vote occurred in spite of the fact that Northern States' license would not expire for seven more years. Issued the choice to remain in competition with the local plant, NSP would instead eventually forfeit its franchise in the town.<sup>ix</sup> As the City Council and its planners forged

ahead for the next 18 months, they encountered many obstacles that were poised to obstruct the plant going into operation.

The City Council began the tedious task of implementing its plans for a power plant system. First and foremost, three lots were purchased from the Minnesota Western Railroad for \$3,500. Soon thereafter, contracts were awarded for the construction of a new power plant building at the intersections of the state Highways 7 and 15. An engineering firm, Buell and Winter Engineering Company, was hired on May 12, 1935 to conduct a complete survey of the city and its electric needs and to develop plans for the plant. R.W. Strohmeier was the designated resident engineer (who would later be appointed the first General Manager of the Light plant). Once the plans from Buell and Winter were approved three months later, the Electric Equipment Company of Des Moines, Iowa was thereupon hired to construct the building for \$41,500. Donovan Construction Co. was awarded the bid to provide the plant equipment for a total of \$114,367; the contract included three 625 horse power 430 kW diesel generating units, switchboard, a complete distribution system, and other auxiliary equipment. The total of all bids amounted to \$223,030, which fell well below the original estimates for the plant. Construction began on the new plant, with the excavation of dirt, at the location on April 21, 1936. With the exception of one foreman, all workers who helped in the construction of the plant were hired locally. By July 3, the poles of the distribution system were all erected and crews were finishing the trimming of trees. Brick was being laid on the building after the foundations and flooring had been poured for the incoming engines. Progress continued at an impressive pace for the duration of construction and was completed eight months later on November 27, 1936.

Because of all the construction work, materials, and people involved, Hutchinson needed to find a way to fund all the expenses. There was immense effort involved in the obtainment of a federal grant to help finance the plant's creation, which would in turn decrease the total amount of bonds that needed to be sold. The first attempt was petitioned for on August 16, 1935 for a Works Progress Administration grant in the amount of \$112,500, or 45 percent of the total amount that was needed.<sup>x</sup> The attempt failed. Another grant application was made to the Public Works Administration (PWA) for only 30 percent of the total. While the City was waiting for the grant application to be approved, they began advertising for bids for the construction and furnishing of equipment of the plant. When the bid letting process began, Northern States Power was unwilling to stand by passively, watching as the Municipal Plant's plans unfolded. NSP tried to get an injunction against Hutchinson in order to prevent the bond payment. The company declared that they would post losses of \$135,000 in revenue if the municipal plant was permitted to be built. Pleas from NSP were dismissed by Judge C. M. Tifft because he noticed that there was a disproportionate amount of signees on the injunction paper; out of a populace that exceeded 3,500 persons, there were only 157 signees, which was a minute percentage of Hutchinson's total population.xi After the failed injunction and almost four months after the antecedent attempt, a grant in the amount of \$76,000 was approved by PWA and was accepted by resolution courtesy of the Council. In spite of all of these incidents, the Light and Power Commission ultimately proceeded independently of PWA after the Commissioners discovered that the grant was not

forthcoming. xii Time was of the essence for the Commission since the demand for power was found well beyond the confines of the city limits.

# **REA Comes to the Region**

The formation of the Rural Electrification Administration (REA) and its request for power from the proposed Hutchinson plant hastened the necessity of the power plant's creation in order to serve farmers in the local area. Up until the establishment of the governmentally-funded REA, most private utility companies had declared that it was much too expensive to string electric lines to isolated farmsteads scattered throughout the countryside. It was a costly endeavor to construct the rural lines, which in turn meant farmers had to pay steeper rates. While many city rates were only four to five cents per kilowatt hour, farmers could be charged a range of eight to 40 cents per hour. Unable to afford these higher costs, farmers had to either reduce or eliminate their power usage. Farmers

essentially had no access to electricity unless they had their own generators. Yet, their needs were substantial and rarely could a single generator support a farmer's daily activities.xv It was the dream of REA to bring electricity to the farmers of both Renville and McLeod Counties and it could be realized through the ongoing plans for the Municipal Electric plant in Hutchinson. The City Council was happy to oblige REA's wishes when they passed the resolution on February 21, 1936. It stated,



Here is a sign that designated a country area that was about to receive power courtesy of REA.

Picture courtesv of http://www.buckevepower.com/upload/images/REA

Hutchinson is anxious to cooperate in the promotion of rural electrification for the benefit of our farmers. The rural electrification project will be the realization of many years of anticipation to have the electrical benefits on our farms which have been heretofore available only to city residents. Work on the rural lines will no doubt be started as soon as the frost is out of the ground and it is the desire of the city of Hutchinson to be ready to furnish electrical energy as soon as it is required. XVI

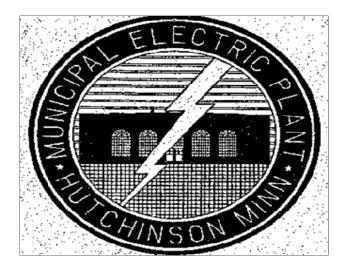
Some men had to journey to Washington, D.C. to meet with REA for some regulatory meetings. On September 2, REA representatives approved the first contract between McLeod Cooperative Power Association (MCPA was the local affiliate of REA)<sup>xvii</sup> and the Hutchinson plant. The contents of the agreement were in regards to the construction of 110 miles of line that needed to be laid in order to

connect the two parties. This was the birth of a mutual cooperation that continued to exist for many years between Hutchinson and McLeod Cooperative. xviii

#### A Commission is Born

Six months passed from when the Municipal Electric Plant was brought into existence to when a Commission was created. After the voters endorsed the new amendment, the City Council established the Light and Power Plant Commission on September 28, 1935. This latest amendment was for the purpose of placing the control and management of operations at the plant under the direction of three qualified locals, with the stipulations that each term was for six years. It granted the Commission, "full, absolute and exclusive control over the City power and light plant." Section 17 of the Home Rule Charter (not to be confused with the City Charter), dictated that the appointed individuals were to assume the different positions (president, vice president, and secretary) through annual elections within the Commission. Dr R.I. Sheppard (a local dentist) was named to a six year term; Dr. A.J. Thompson (a veterinarian) was designated to a four year term; and R.W. Dahl (a New York Life insurance agent) was appointed to a two year term. On the next day, the Commission was organized with Sheppard elected as its President, Thompson was nominated Vice President, and Dahl was appointed as the Secretary. These three prominent individuals would continue to serve as Commissioners for the next 24 years. For more than 50 years, the Utilities Commission would consist of three qualified voters and residents of Hutchinson that were appointed normally by the incumbent Mayor.

After years of planning, steering, spending \$223,030 on all of the equipment and labor bids, and expeditiously erecting two engines, the Municipal Electric Plant was ready to serve Hutchinson and the surrounding country populace. A statement uttered by R.W. Dahl's son, Jim, aptly epitomized the experience of the Plant's supporters: "Change is inevitable, but very difficult to obtain." \*\*

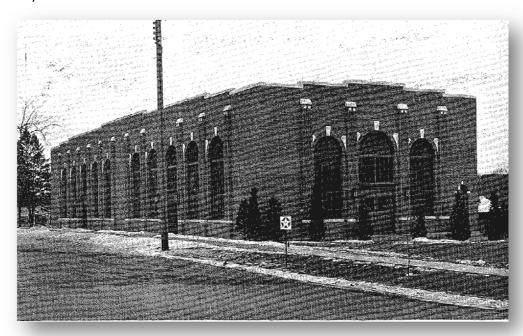


The Municipal Electric Plant's original logo.

# 3. A Historic Day for Hutchinson

Lights flickered to life first along the streets, known as the "White Way" in the community, at 8:30 A.M. on the fateful day of November 27, 1936. The first residential recipient of power transferred over from the wires of NSP was Frank J. Zila. XXI Zila was owner of the infamous Zila Hardware Store in Hutchinson. He was bestowed this honor after being one of the most zealous advocates for establishing a municipality in Hutchinson. XXII The Leader covered this monumental occasion. It reported,

November 27, at precisely 8:30, with a small crowd on hand to witness the ceremony, Dr. R.I. Sheppard, chairman of the Light and Power Commission, turned the air valve on the first big Diesel engine at the new \$250,000 Municipal Power plant on North Main St. that started the engine turning and generating current. Then Dr. A.J. Thompson, another member of the commission, adjusted the switchboard, and R.W. Dahl, secretary of the commission, threw the switch that sent the first current through the distribution system. These three simple operations were historic in the life of the Hutchinson community. This meant that for the first time at least some part of Hutchinson was being supplied from a city owned plant. The first Diesel has been ready for several weeks, and Tuesday of this week the second engine was started for the first time. The third engine is now on its foundation but it will be about two weeks before it is ready. The general changing over will proceed rapidly and it is expected that the leads will be connected and meters installed at the rate of from 30 to 50 customers a day in a short time. Since the first electricity or use was generated on Nov. 27, the entire white way system and street lighting, holiday decorations, water pumps, sewage disposal plant, public library and a few residences have been connected. \*\*Xiiii\*\*

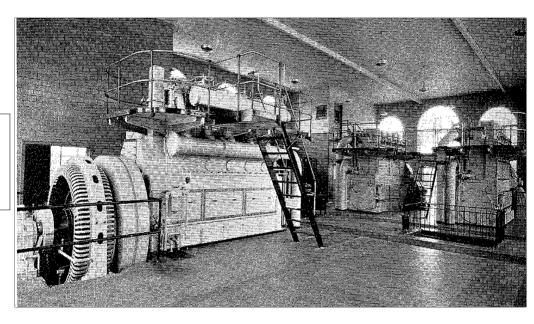


The Original Power Plant, circa 1936.

# 4. The Early Years

A common theme throughout the Utilities' history has been its perpetual growth. There has always been a need to provide more energy, to increase the producing capacity and baseload. Even in its infancy, the Utilities had the third engine go on-line during the winter months of 1937, "in order to assure the electrical consumers in Hutchinson of a continuous and uninterrupted supply of electrical energy." \*\*XXIV

R.W. Strohmeier, the first plant superintendent who led the business for six years, stated in his first plant narrative, "With this report comes proof of the sound judgment of the citizens of Hutchinson in the establishment of their own electric system, since a study of the facts...will show the success of the initial year's operation to be beyond the fondest hopes of the plant's most ardent supporters." The plant was able to operate competitively with the offering of low rates. During this first year of operation, 65 ranges, 20 water heaters, numerous oil burners, refrigerators, and other installations were added to the distribution system load.



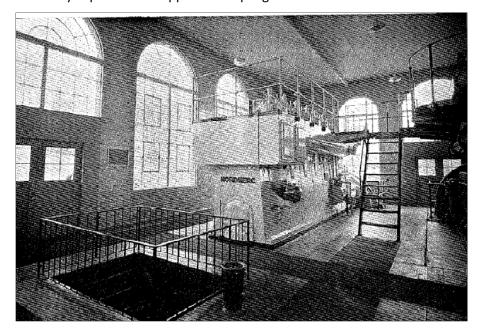
This picture was taken in 1936 of three 625 horsepowered 430 kW units.

# *Impressive Numbers*

From the onset, the Municipal Plant posted impressive numbers. In its first month of operation, December 1936, the plant generated a total of 111,460 kilowatts. By January 1937, over 600 customers were connected and a mere three months later, the system was furnishing power to 1,171 customers. The plant grossed a \$30,000 profit in just six months of operation. From 1936 to 1938, the Plant had already produced over six million kilowatts. The increase in total outputs led to a staggering 41 percent increase over the same six months of 1938 as well as a sales increase of \$10,000 over the same period of 1937. Fortunately, the new 1,500 horse-power Nordberg Diesel was in regular operation.

During this time, a watershed event was about to unfold for agriculture. Electricity had limitless potential uses for not only the city-dwellers but for farmers and other agricultural workers as well. The REA began its operations with the first line being energized on May 29, 1937 in the Hassan Valley Township. A few customers were immediately served; the number steadily climbed to 803 customers by March of 1938. Farmers were now going to be able to harvest their crops more efficiently, install lights in their barns to see the animals, and to finally have the power to run vital electric devices; feed grinders, milk coolers, and automatic pumps were just a few inventions that provided new levels of productivity. According to Superintendent Strohmeier, "It will, as well open a vast new field of usefulness to electricity, the most versatile servant of man, and in so doing, offer a greater share of that usefulness to the farm dweller."

The second year of operation, 1938, made it apparent that additional generating power was a necessary expedient to support the rapid growth of the local area. Because of the invention of new and



The Nordberg unit, circa 1938.

pragmatic appliances, such as ironers, and the growing popularity of refrigerators, these items became increasingly more stylish furnishings in homes that in turn fueled the demand for more power. At this time, consumption of the average Hutchinson resident was 1,002 kWh; the national average was 850 kWh. During a Light and Power Plant Commission meeting, the

Commissioners stated that the city peak demand during the

coming December was projected to be over 900 kW and could even surpass the 1,000 kW mark. Since it was standard power plant practice to assume that one unit could become unavailable at any time, the full load capacity for two of the Plant's units was only 860 kW. Due to these less than desirable circumstances, the Commission was charged with the responsibility of maintaining, to the best of their abilities, a satisfactory level of operation and an uninterrupted supply of its services. Therefore, the Commission resolved that bids were to be taken for any additional units after the engineers of Buell and Winter Company prepared a load study and devised the specifications for a generating unit. Bids were taken on May 6, 1938 for the additional unit and a 1,500 horse power Nordberg engine. With the addition of the Nordberg purchase, it nearly doubled the capacity of the plant. Due to the price tag of the engine (totaling \$84,418.32), pledge orders amounting to \$90,000 were sold to finance the purchase. Payable solely from plant earnings, the ratepayers of Hutchinson would not have to pay a

single cent for the unit and engine. The new engine was able to go on-line on October 23, about two months before the teeming winter demand load. To accommodate more growth, the Light and Power Plant would acquire a total of six generating units over the span of 10 years, from 1937 to 1947.

Throughout the late 1930s, the average price per kilowatt here was 3.47 cents whereas the national average was 4.2 cents; this marked the beginning of a long tradition in which the Municipal Plant and Commission offered some of the lowest rates found in Minnesota, as well as the country. Regardless of its economical rates, the Plant was proving to be a financial sensation. For the 1938 fiscal year, the net income was \$39,000, which was an increase of \$7,500 from the previous year. The annual report surmised with, "It may be worthy of note that the plant was successful in operating the entire year without service interruption, excepting a few cases involving minor sections of the distribution system." Considering these facts, it was evident that the infancy period of the Municipal Plant was highly successful in regards to customer satisfaction and net income.

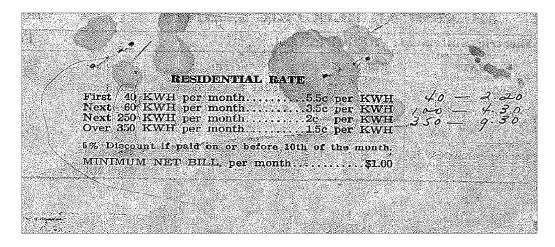
# **Growth Continues**

In the meantime, the Power Plant was continuing its familiar theme of explosive growth. The year of 1939 saw almost a million more kilowatts generated than the previous year, adding up to 5,234,300. Average domestic use soared to 1,125 kilowatts compared with 1,002 from the previous year. Aggregate sales went up to \$119,000 and the net income amounted to \$46,000. Within these three years, \$152,000 out of the total initial investment \$401,000 was paid. \*\*Compared to the solely be attributed to a surge in the use of appliances.

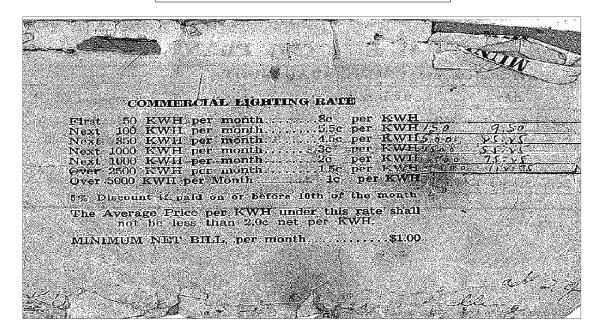
Keeping a fundamental role in the plant's explosive growth was the McLeod Cooperative Power Association and its customer base of over 2,000 persons, which were serviced by the local plant in Hutchinson. The Light and Power Commission desired to have additional capacity operative by the peak season of 1940. A letter was sent to Mr. Lars Leifson, President of MCPA, in order to address the pressing growth issue. It stated, "Your present contract has until September of 1941 to run, a matter of approximately two years. Your project has grown at a very rapid rate and neither us nor yourselves, we believe, can accurately forecast the growth to be expected further than probably the present year." A new REA contract was promptly signed on February 13, 1940. After the approval of the new REA contract, more equipment and facilities needed to be built to accommodate the increase in load. A modern substation was built close to the plant with new feeder lines laid. Electricity was transmitted to the substation where the high voltage electricity was converted to lower voltages that were befitting for consumer use."

With the advent of a new year, it became more apparent that additions to the plant were imperative. New generating equipment and an addition both to the building and switchboard were needed. The matter went to the ballot in a special election for voters on June 4, 1940. Plant expansions were approved by a 10 to one vote. Buell and Winter Engineering Company were once again hired to prepare the plans and specifications for the Commission. On July 31 bids were opened for another engine and generator. They received three bids, from Nordberg Manufacturing Company, Busch-Sulzer Brothers Diesel Engine Company, and General Machinery. The bid of Busch-Sulzer Company from St.

Louis for a nine cylinder 3,060 horse power unit in the amount of \$179,775 was accepted. In order to accommodate these new purchases, plans were prepared for an addition to the plant building to house three units of the Busch-Sulzer Diesel engine. Bids opened on March 12, 1941 with the George Carlstrom Construction Company of Mankato having the lowest bid of \$45,848. Electric work was awarded to Maier Electric Company of Minneapolis for \$2,598. Since equipment was being purchased and plans were materializing for the expansion, the Commission needed to get bids for \$180,000 plant revenue certificates to help finance the project. A favorable rate of slightly over 2 percent was obtained with the stipulations set that once again all payments had to come solely from plant earnings, not the citizens. All of the improvements except the new Diesel were paid from current earnings while the pledge orders only paid for the engine.



Rate schedules that date back to February 1, 1948.



# 5. The War

Just three years after the Electric Plant was created, World War II descended on Europe. While most of the participants of World War II (WWII) had joined the fight in 1939, the United States held an isolated stance prior to December 7, 1941. Albeit their political seclusion, the American government began shipping supplies to the Allies. As the war years progressed, the ability to obtain critical materials for the power industry, such as copper that was needed for installing new equipment, was greatly hindered due to the diverting of resources from home to abroad. Considering the prevalence of rationing throughout the country, the Light and Power Commission was fortunate to have secured the contracts for the new Diesel engine as well as other materials for construction during the previous year; their good planning spared Hutchinson many ordeals such as enduring a scarcity of energy. Slowly, the war that was an ocean away started to have an impact on Hutchinson.

During the autumn of 1941, the City Council advised the Commission that there were insufficient funds in the General Fund to meet the current obligations of the City. In response, the Commissioners meticulously evaluated the financial health of the Plant. The men were informed that the sales for 1941 had climbed to \$137,000, which was an increase of \$18,000 over the previous year. Likewise, by the spring, the Plant's investment had totaled \$610,000 and \$245,000 worth of bonds had been paid. Upon their assessment, the Commission deemed that its finances were in order and that all bills could be paid satisfactorily. On November 4, they passed a Resolution that authorized the Commission to contribute \$10,000 to the City Treasurer for a deposit into the General Fund of Hutchinson. This was the beginning of an annual (now quarterly) financial contribution that the Utilities have continued to make through the years, except for a single year, 1944.

The Light Plant witnessed a spike in energy sales while facing a shortage in the supply of generating resources, all because of WWII. Energy sales to the McLeod Cooperative Power Association (MCPA) increased 58 percent, or almost a million kilowatts; the city paralleled this rise with a consumption that went up 42 percent during the year. MCPA's greater increase in demand was due to the war effort and the overwhelming delivery of materials to Europe. Rather inopportunely, the Cooperative had to wait almost a year to receive wire to make the necessary additions to its system, which spanned an area of 40 miles wide and 70 miles long, because of a stall in the deliverance of electrical equipment.

A strain on resources was not limited to material goods alone; the labor situation became uncertain as more men swelled the ranks of the United States Army, Navy, and Air Force following the attack on Pearl Harbor. Here in Hutchinson, the Light and Power Plant could not afford to lose its workers and their valuable knowledge. To curtail the effects of an acute shortage of skilled workers, the Commission passed a Resolution that granted certain employees bonuses after they remained in continuous employment of the Plant, from July 1, 1942 through July 1, 1943. In 1943, bonuses were rewarded to the men who had stayed with the plant the entire year. This program was reinstated the next year to retain the services of their invaluable workers.

Times were tough for the next three years because war restrictions and shortages handicapped municipal operations across the country. In spite of the hardships, Americans near and far dutifully answered their government's call to not only conserve energy, but to preserve their surplus produce, buy war bonds, and plant victory gardens. A positive note in all of this was that steady growth and progress occurred in Hutchinson despite the ramifications of war.

The employees of the Light Plant soon found themselves creeping dangerously close to having an energy shortage because the plant no longer had a sufficient firm capacity to meet the electric service needs of the community. In the spring of 1945, the Commission passed a Resolution in response to the immense growth of peak loads, since they reached the point where the firm capacity of the Plant was 2,190 kW; anticipated peak loads for the immediate future of Hutchinson ranged between 3,000 and 3,500 kW. Due to such conditions, the firm capacity of the Plant was almost 1,500 kW short of the speculated Plant requirements. The Commission took action by proposing to secure an engineering firm's services to make preparations for the construction of suggested improvements. A few weeks later, on April 30, contracts were signed for a second 3,060 H.P. Busch Sulzer diesel engine at a total cost of \$211,500. Once again, the costs of the pledge orders were only payable by the income of the plant. Although the unit did not go on-line until 1947, it helped to alleviate effects of the energy shortage.

Even after the conclusion of World War II, strains were prevalent on the supply of power. A typical example of the hardships endured during these times was the joint communication by the Commission and the REA board issued on October 28, 1946, before another new engine was installed and operating. The letter declared,

Acute shortage of generating power at the present time due to circumstances beyond the control of the McLeod Cooperative Power Association and the Municipal Electric plant make it necessary to send a letter to all customers announcing enforcement of a curtailment of electric consumption between the 6 p.m. and 7:30 peak period until this emergency has passed.

A recommendation was even submitted to the Hutchinson Civic & Commerce Association to abandon the Christmas street lighting decorations for the impending holiday season because of the scant supply of electricity. Outlying street lights were to also be left off until the peak load was over. xxxv

Even though WWII was fought in nations that were continents away, the effects of the armed combat could be felt in small towns in the Midwest; Hutchinson was not an exception. While the Commission had to contend with a potential shortage of personnel and supplies, the Light Plant was able to ward off any debilitating crises. Though many utilities were facing hardships, Hutchinson was fortunate enough to acquire additional generating units that could fulfill any energy needs of its rate payers. With the war behind them, the Commissioners and plant employees were ready to cross over into the next decade.



Taken in 1952, the entire staff and Commission of the Light and Power Plant gathered in front of its building for this picture.

Front row, left to right: Leif Larson (lineman at start), Francis Ahrens (later Aitkin Supt.), Harvey Daharsh, Ralph Hakel and Norwood Reynolds.

Second row, left to right: Ross Heilman, Ruth Hakel, Ralph Young, Dr. A.J. Thompson, Dr. R.I. Sheppard, R.W. (Dick) Dahl, Darlene Klinger and Bob Schulte.

Back row: left to right: "Doc" Krantz, Louis Bipes, John Fisher, Fred Youngblut, Datlof Weseloh, Elmer White, Percy Knutson, Phil Graf, Harvey Schultz and Hugo Mahs.

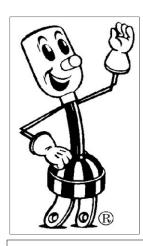
# 6. A New Decade, a New Division

The 1950s held an elusive goal for the citizens of Hutchinson. For most of these 10 years, the Commissioners and Plant's employees labored to attain a new commodity that was identified by its blue flame. Natural gas came to the forefront of the national energy market upon receiving acclaim as a reliable and cheap resource that could heat homes and run generating units at power plants. While energy pundits hailed its use and management at the Light and Power Plant were eager to acquire gas mains, they had to face many foes along their pursuit.

# Financial Feats

After 13 years, the last pledge orders from financing the Plant were paid in the spring of 1950. Financially speaking, it was becoming an advantageous operation for the community; contributions to the city amounted to \$150,000. The Plant was valued at more than \$1,100,000 and became debt-free for the first time. All of the bonds, including the original \$250,000 pledge bond that allowed for the creation of the Municipal Plant, had been paid entirely out of its earnings. This financial achievement was accomplished without the citizens of Hutchinson because no local taxes were ever waged for the building's formation.

# **Rural Generation**



Willie Wirehand, with his lightsocket head, push-button nose, and electrical plug, was the icon of the rural electric cooperative industry. He symbolized dependable, local, and consumer-owned electricity. Photo courtesy of http://www.oremc.com

Mirroring the surge in sales of Hutchinson, REA reached a peak in business during 1950, when they totaled more than \$155,000. After that, their perpetually growing needs were transferred to other sources of power outside of Hutchinson. Two years later, on March 17, 1952, the McLeod Cooperative Power Association (MCPA) requested for a release of a certain area in which MCPA had distributed electric energy generated by Hutchinson's Municipal Power Plant. This request came at a convenient time because the total maximum energy requirements at the Power Plant reached a point where there was a "dangerously small excess of generating capacity that remains over load requirements." Kilowatts generated during this year exceeded the 20 million mark, with the city's residents consuming about 20 percent more than REA's

customers. The Commission passed a resolution that obliged MCPA's wishes.

#### A New Name & a New Division

The most profound incident to occur during this decade in the Plant's history was when two special elections were held on December 9,

and December 17, of 1954, respectfully. Three different propositions were presented to the citizens to vote on. First, there was a notion to change the name of the Light & Power Commission to the Hutchinson Utilities Commission (HUC). It passed by a wide margin: 866 to 94. Personnel remained the same as it had been since the inception of the plant: Dr. R.I. Sheppard, President; Dr. A.J. Thompson, Vice President; and R.W. Dahl, Secretary. The desired name change of the Commission reflected the

yearning of its Commissioners to launch a new direction of serving Hutchinson's customers. Secondly and more significantly, the City Council made a bid to have a municipal natural gas plant. Consumerism was increasingly on the rise in America; the desire to have the conveniences of a modern stove and furnace ignited a desire for a more affordable and reliable way to get gas. Natural gas was rapidly becoming the most widely used and convenient fuel available in the United States; since 1938, natural gas had become progressively more plentiful each year with output rising 200 percent over a 16 year period. It gained popularity as an attractive commodity because the price for gas made it a more affordable fuel source than coal or fuel oil because it could save rate payers 25 percent on their bills. At the current moment, Hutchinson had only one privately-owned gas company, Hutchinson Gas Company, which had a limited service area. The final voting proposition was in regards to what body should establish, construct, and operate the proposed municipal gas division; that body was the Utilities Commission. Due to its impeccable record of running the Light Plant for the past 18 years and the fact that the municipality was the "envy of every utility commission in the entire Midwest," the Commission was the only appropriate option for the city leaders to choose from.

While the notion of having natural gas was an attractive idea, unease began to prevail in the community, prior to ballot votes being casted, of the financial woes that the community might inherit if the Utilities actually went through with constructing a distribution system for natural gas.

Misconceptions about the safety of natural gas were also circulated around the town. Worries were assuaged and rumors dispelled after the Mayor, Harold R. Popp, addressed many of the residents' concerns in an article published a week prior to the special election. The original estimations of the gas distribution system construction were approximately \$400,000. Although it had an expensive price tag, the Mayor assured the general public that the Utilities could realize savings in owning the gas distribution system with an estimate of \$50,000 to \$75,000 in profits per year after the bonds were paid in full (which was supposed to take less than 10 years). The Electric Plant was also in a position to receive benefits from natural gas because they were able to use it to fuel their engines, so no revenue would be lost. \*\*xxxviii\*\* Once again, the City would issue revenue bonds, meaning that the citizens would not be taxed for the expenditure. The City Manager of New Ulm, Philip L. White, echoed Mayor Popp's sentiments as a supporter of Hutchinson acquiring its own distribution system, just like New Ulm. In a letter that was published in the Leader to arouse support for a municipal gas system, White reasoned,

There are many other advantages including the fact that the rates are set by a local body who are under the control of the voters of the municipality. No outside interests have any control over the operation of the gas department. There appears to be every advantage for the city and its taxpayers in municipal ownership. \*\*xxix\*\*

The latter propositions of the fateful December vote were to determine whether the community should construct or purchase a municipal gas plant and distribution system to be paid out of plant earnings. Vesting authority in the newly named Hutchinson Utilities Commission to operate a gas distribution system, the measure passed with an overwhelming majority, 857 in favor of the measure to 101 that were against it. The Utilities Commission prepared to embark on a new path. Now, the

Commission was entrusted to not only oversee the Light and Power plant, but the construction and running of a municipal gas plant as well.

Unbeknownst to the Commissioners at that time, the quest to establish a natural gas distribution system was going to be a long and arduous struggle. Procuring a gas allocation from the Federal Power Commission (FPC) was touted as the most difficult job that any City Council member had ever undertaken; the FPC, which was vested with responsibilities to award power allocations to various locations around the country, would not grant a gas allocation to Hutchinson unless it was thoroughly convinced that a gas plant could be operated efficiently and run at a profit. It was widely known that FPC leaned towards granting gas allocations to the private industry instead of the public sector. xii

The first step that the City Council took was the passage of a resolution to once again enter into a contract with Buell & Winter, Consulting Engineers, to prepare all engineering data and exhibits. Hubert H. Schultz, an attorney from Iowa, was selected to present data to the Federal Power Commission in Docket No. G-4259. \*\*Iii Schultz was chosen because he had been instrumental in obtaining municipal gas establishments in numerous Iowa communities. \*\*Iiii Since presenting to FPC was such a large undertaking, the Utilities Commission appointed Martin Toscan Bennett, a consulting engineer located in Washington, D.C., to assist Buell & Winter in the preparations and presentation of the case. The engineering firm was to furnish the City with detailed statistics showing the experience of other cities and towns who were in the business of owning and operating gas utilities. Statistics of production, gross income, net earnings, plant investments, bonded debt charges, and rate schedules were all to be collected to depict a pattern for the City and its citizens regarding the advisability of municipal ownership of gas utilities as well as the feasibility and practicability of financing the project. Through these intensive studies, the firm of Buell & Winter determined that a natural gas distribution system was

an	HUTCHINSON UTILITIES COMMISSION
economically feasible project that could be	Date
	Address  Are you interested in natural gas service at this time?  We request installation of natural gas service for our residence, or place of business, at this time.
largely because of its	Purpose:1. Cooking2, Heating3. Water Heating4. Other Will you consider natural gas service at an early date?
possession of the Electric	Not interested at this time. Request additional information.
Plant (the town had	Remarks
alternative means of	Solicited by

taking on the summer load). After validating the project's practicality, the firm was charged with

conducting a house-to-house gas survey of Hutchinson's residents. The results were indubitable: most citizens wanted the gaseous commodity to be available in their residences. HUC turned to Northern Natural Gas Company (Northern), based in Omaha, Nebraska, to be their supplier of gas because they offered services such as providing natural gas transportation between other interstate and intrastate pipelines and various storage services. The company had proposed to build a gas line coming down from the Canadian border after they entered into a contract with Trans-Canada Pipelines, Itd; Northern would connect with the Canadian line at Emerson, Manitoba and transport gas south. With the pleasant results of the survey, studies, and proposed business relationship with Northern in tow, City officials and Utilities' personnel expected to have gas in their mains the following year following a formal hearing before the Federal Power Commission. \*\*Iiv\*\*

# Another Spurt of Growth

In the midst of garnering research, the Utilities and Hutchinson were experiencing some serious growing pains due to the expansion of 3M and the proliferation of other businesses. To ease the aches, the Utilities Commission scouted more land to purchase for its anticipated expansion. The Commissioners turned to the Minnesota Western Railway Company's property east of the Plant to the west line of Prospect Street. Wanting to obtain ownership, the Commission agreed to pay \$2,072.90 to the railroad for a Deed to the property. xIV Land was again purchased in 1956, this time from residents for \$7,000 to establish a site for the new warehouse and garage. Following the acquisition of land, contracts were awarded for a \$300,000 addition to the Municipal Electric plant, made necessary for the installation of a new diesel unit. With the acquisition of this equipment, the additional power was expected to be ample enough for the customers of Hutchinson for a number of years; the engine would increase the plant's generating capacity by 32 percent, from 6,240 to 8,236 kW. The Nordberg bid on the engine was \$240,000. It was a 2,810 H.P. 2,000 kilowatt dual fuel engine which adapted either oil or gas. XIVI Located in the southwest part of the original building, the Nordberg was to replace engine No. 2, a McIntosh-Seymour with 430 kW capacity. Only a year later, in March 1957, bids were taken on a second 2,000 kW capacity engine. This item was purchased from Nordberg Manufacturing Company for \$366,764.30.

# Struggles to Bring the Blue Flame to Town

The FPC proceedings started during the winter months of 1955, in which Northern Natural Gas applied for a certificate of public convenience and necessity and sought an allocation of natural gas for Hutchinson's municipality, as a municipal distributor. Within this case there were 365 towns who were all soliciting gas, only a few of which were seeking municipal ownership. April of 1955 brought disappointing news from Hubert H. Schultz, attorney for the City and Utilities Commission. The supplier of gas, Trans-Canada, was unable to complete its financing arrangements in time to bring gas to the threshold of Minnesota. Northern Natural Gas Company had made an application to lay pipeline from the American/Canadian border at Emerson down to Farmington; this line was to pass within a few miles of Hutchinson. On top of Trans-Canada's financial troubles, the proceedings had proven to be tedious since over 350 towns were involved and 90 interveners were on the case, including Hutchinson. Every

party had their own host of witnesses, engineers, and financial experts presenting testimony and could be cross-examined. Obviously, all of the testimony took months to evaluate and be digested. Yet, Schultz assured his audience that, "Of the 356 towns in 6 northwestern states involved, Northern has selected 22 towns they want to serve and Hutchinson is 1 of these 22." He was convinced of Northern's desire to bring gas to Hutchinson because of its reputation as a good town with a burgeoning population and profitable industries. Because of this uncalculated adjournment in the hearings, the Utilities' plans were stalled. While the Utilities had many people's support, the Commission faced some stiff opposition.

Adversaries came forth, which also put a delay in the proceedings. Several of the larger cities that received natural gas, such as the Twin Cities; Lincoln, Nebraska; Sioux Falls, South Dakota; and Des Moines, Iowa filed a motion to dismiss the proceedings. These cities were afraid that this new Canadian gas was going to be a more costly expenditure for current Northern customers. They also feared that additional gas extensions would divert the resource away from metropolis users. In response, FPC stymied the urban cities' appeal when it dismissed their motion on account of the fact that natural gas was plentiful and would remain an affordable option for all parties involved. Despite this victory, Northern had the great misfortune to request a postponement in the pipeline's creation until the fall of 1956 or soon thereafter in order to locate an appropriate replacement for Trans-Canada. Nevertheless, Schultz defiantly ended his meeting with, "It isn't a question WHETHER Hutchinson gets natural gas; rather it is WHEN." Schultz and others were optimistic of the chances of natural gas flowing through the mains by the fall of 1956 in Hutchinson. However, the next two years were marked with Northern making two more attempts, on behalf of Hutchinson, to gain allocations for gas. They were in vain. Yet, the Utilities refused to waver.

# A Milestone for Contributions

Despite their struggles with FPC, the Utilities was able to attain a new level of financial success. The plant was doing remarkably well, with total assets exceeding the two million dollar mark for the first time during the spring of 1957. Continuing its fiscal relationship with the City, the Commission achieved a milestone when it exceeded the one-half million mark in contributions to the City Council, rising to \$548,000 later that year. All the while, the need and desire for natural gas service for the City's commercial and industrial establishments as well as for the citizens became even greater than it once was.

# Moving Forward

The unfolding of certain events during 1959 resulted in the realization of the Utilities Commission and City Council's dream. A Resolution was passed by the Commissioners in regards to the legality of having the Carleton D. Beh Company of Iowa financing the natural gas plant system. This time, it stated that under Chapter 17 of the Home Rule Charter, HUC was,

authorized to construct or acquire a gas plant and distribution system and whereas in order to obtain a certificate of convenience and necessity under the Natural Gas act, it is necessary to

show the ability of the City to finance such construction or acquisition; and whereas the Commission has entered into a contract with Carleton D. Beh Company who has agreed to finance such plant and system; and whereas there is doubt as to the power of said Commission to so contract under existing laws of the state of Minnesota; be resolved that the Honorable Harold R. Popp and the Honorable Walter C. Jungclaus, senator and representative...are requested to obtain the passage of a special law to authorize Hutchinson Utilities Commission to issue revenue bonds and ratifying said contract for financing a gas plant and a gas distribution system.\frac{1}{2}

Thanks to Popp and Jungclaus' efforts, a bill was passed by both houses of the Minnesota Legislature during the 61<sup>st</sup> session in 1959. It was identified as House File no. 1845. Within the contents of this file, Chapter 524 pertained directly to the Hutchinson Utilities Commission. The state authorized the three Commissioners to issue and sell revenue bonds that would not exceed \$650,000, in order to provide money to construct a city gas distribution system. Commonplace in Utilities' history, the bonds were to be payable solely from the revenues of the gas distribution system. Despite having the state's approval, HUC still needed to go before the Federal Commission to have its application with Northern be approved.

Despite all the setbacks, Hutchinson Utilities was finally awarded a victory due to a dearth in the supply of natural gas. The FPC belatedly authorized Northern to expand its natural gas pipeline system to 342 Midwestern communities, which included Hutchinson; the expansion also constituted some surrounding communities, such as Glencoe, Silver Lake, and Dassel. Triumphant, the August 4, 1959 Leader edition declared that, "Natural gas service is definitely coming to Hutchinson and other towns in this area." Work was to begin immediately on the \$25 million expansion of Northern's pipeline; construction on the Farmington-Willmar line extension came with a price tag of \$3,842,940. Cost of installing the mains within Hutchinson was estimated to be \$650,000. These moments of triumph were disrupted when challenges from the government and bigger cities came during the autumn months.

The crusade hit a major snag one month later when the Federal Power Commission experienced a change of heart; FPC denied Northern's application for a rehearing of Docket Nos. G-17485 and G-17486, (dockets pertaining to various communities in Minnesota) due to financial concerns that FPC had for Northern. Ergo, an appeal was filed by Northern to the Courts. The appellants solicited \$120,665 from the communities along the proposed Willmar Branch to help pay for the branch line's construction costs and alleviate FPC's fiscal apprehensions. Each distributor of natural gas in the affected communities was itching for an early construction of the branch line so that natural gas service would be initiated by the fall of 1960, especially Hutchinson. Hence, the Commissioners resolutely authorized Hutchinson Utilities to enter into an agreement with other distributors in which they agreed to contribute up to \$25,000. In light of Northern's emphatic appeal, the matter was resolved in a favorable manner when FPC approved gas service to the remaining towns.

Just under two months later, officials of the Minneapolis Gas Company incessantly affirmed that they were moving onward with their court battle to block natural gas service to Hutchinson and 24 other communities, all of which were scheduled to receive gas pipelines. Many of Hutchinson's neighbors

were among the targeted and all were considered to be smaller communities: Willmar, Atwater, Grove City, and Dassel. Spokesmen of the Minneapolis Company asserted that they were uniting forces with the cities of Council Bluffs, Iowa and Omaha, Nebraska in their planned appearance to go before the U.S. District Court in Philadelphia on November 15. Their aim was to beseech the court to set aside FPC's July decision to finally approve gas service to communities on the proposed Farmington-Willmar branch line, among others. These indicters once again challenged that some of the targeted towns would be unable to use enough gas to make the line a paying proposition and they were fearful that eventually Minneapolis users would be charged higher rates to cover the losses to the distributor (Northern). In Hutchinson and the other targeted towns' defense, a Willmar city attorney claimed that the feasibility of the service had been proven beyond a doubt to FPC in prior hearings. This counselor also pointed out that FPC, in its decision to certify distribution facilities in the Hutchinson and Willmar area, had considered the testimony of the Minneapolis' gas firm but that FPC had overruled these objections and had issued the order to Northern to provide service in the area. A steering committee, that represented the 25 towns, met with the Minneapolis Company in a fruitless attempt to persuade the company to drop any court action. The personnel from Minneapolis continued in their quest in attempting to squash any hope of gas arriving in the mains of Hutchinson and other towns. Ultimately, Minneapolis'

# End of an Era

efforts proved futile.

During the spring of 1960, one of the mainstays of the Utilities Commission resigned: R.W. Dahl. After being the Secretary for almost 24 years, Dahl submitted a letter to the Mayor and City Council regarding the abdication of his post. Wallace Kurth was appointed to complete the unexpired term of Dahl, through September 1962. Yet, Dahl's services were retained as he would continue to be the Secretary for an unspecified amount of time due to his extensive knowledge and experiences with the Utilities. Within six years, the last of the three original Commissioners retired. These stalwart men had a profound influence on the community and were indispensible to the creation and further development of the municipal plant.

#### The Dream Ultimately Comes True

Considering that the permits approving the Farmington-Willmar line had not been revoked by FPC and Northern had given the go-ahead, plans were moving along in spite of problems with Hutchinson's urban counterparts in

The Utilities Commission of 1960. From left to right: Commissioner Wallace Kurth, President Dr. R. I. Sheppard, and Vice President Dr. A.J. Thompson.

the summer of 1960. HUC advertised for bids in hopes that natural gas would be available to local

users in the fall; Northern had notified the Commission that its plans were to have the line completed by September 15, 1960. The natural gas was to be delivered to a Border Station, located north of Hutchinson; it was equipped to measure and regulate natural gas that was purchased from Northern's pipeline. Natural gas was principally going to come from large supply areas of the Panhandle and Hugeton fields which encompassed parts of Texas, Oklahoma, and Kansas. A contract was entered into with the L.R. Young Construction Company of Salem, Illinois to construct gas mains, services, and regulating stations in Hutchinson during August. Their bid was the lowest out of four with a total amounting to \$396,169.15. The work entailed laying some 40 miles of gas mains in the city's streets and alleys. The distribution system consisted of steel pipes in an array of different diameters, from 10 to two inches, which were installed about two-and-a-half feet underground. After they had a confirmed contractor, work was expected to start a few weeks later with a scheduled completion date of November 1.

Following a successful courtship, the Utilities Commission was able to hire Orville Kuiken of Sioux Center, Iowa to become the Natural Gas Superintendent. He was selected due to his extensive knowledge of how to create a natural gas department essentially from scratch; he had already achieved such a feat while he lived in Iowa. According to an interview with Kuiken, the most exacting aspects of running the Gas Department was the size of Hutchinson. "The challenges were mainly being that it was a bigger town. There were also some difficulties in getting the gas line to the companies of 3M and Kraft." It was a daunting task to bury all the mains, but Kuiken and the other men and women of the Utilities were up to the challenge. Just ahead of schedule, construction of the distribution system was completed and the gas mains were finally ready to receive gas on October 26.

# Gas Readily Flows into Hutchinson

Hutchi	nson Utilities Commission			
Hutchinson, Minnesota				
ESIDENT ICE PRESIDENT AMISSIONER	August 14, 1961			
***				
Citizens of Hutch	hinson:			
	Company's franchise has expired, and they service from their propane gas line			
If you are in nee the Natural Gas plumbing and he	ed of a service line for natural gas, contact Division — telephone 7-3975, or your eating firm now.			
	en de la companya de La companya de la co			
	HUTCHINSON UTILITIES COMMISSION Natural Gas Division			

By early November of 1960, the Utilities Commission requested that the City Council notify Home Gas Company, Inc. to discontinue using their distribution system and fill the pipes with water. liv This signaled the transfer of natural gas ownership from the private industry to the City. Once the Utilities' gas was flowing through the mains, it became indicative of the growing levels of activity and served as a testament to the progress found in Hutchinson. With the extensive availability of natural gas, Hutchinson became a much more attractive option for future industries to locate or

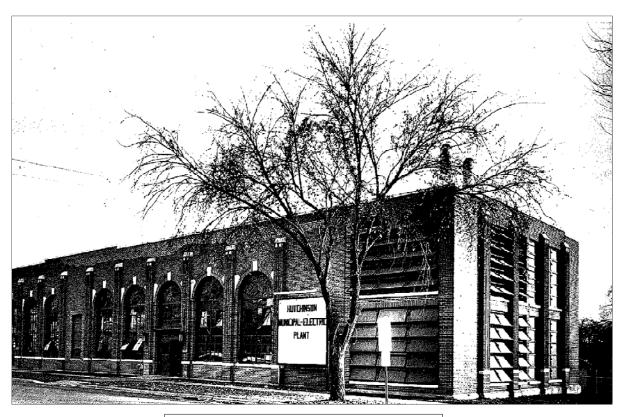
expand. When companies would decide on new plant locations, they would consider a community's

source of economical, dependable electric power as well as the availability of natural gas. Both could now be found in Hutchinson. Cries of jubilation were found in various articles in the Hutchinson Leader. One professed,

The coming of natural gas to Hutchinson will mean the consumer can now enjoy the comforts of heating the home with this modern, clean, automatic and economical fuel, as well as being able to cook delicious meals with controlled, constant "blue flame" natural gas. Your automatic gas water heater will supply you with an abundance of hot water at all times, and your automatic clothes dryer will have the best fuel available.

We believe, also, that the good citizens of Hutchinson join with us in the feeling of elation that is ours, now that seven years of time and unceasing effort have finally been rewarded with the attainment of OUR GOAL, a BRAND NEW MUNICIPALLY OWNED NATURAL GAS DISTRIBUTION DIVISION. This plant is yours....

The quest for the establishment of a natural gas division for the Hutchinson Utilities turned from a seemingly straightforward project to a laborious and convoluted undertaking. Ultimately, the Hutchinson Utilities and its Commissioners emerged as victors on the well-beaten path over its many foes to satisfy rate payers' voracious hunger for the blue flame.



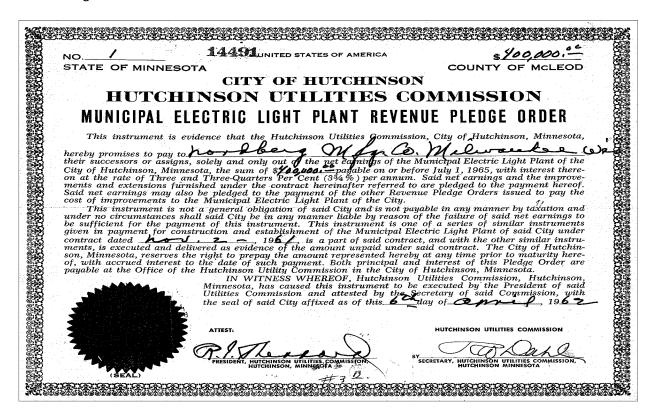
The Electric Plant at the end of the 1950s.

# 7. The 1960s: A Time of Growth

Following the advent of creating a municipal gas department, Hutchinson had a pressing need for more energy. It was an unrelenting demand that was fueled by the continual growth of the community. The demand would not subside for the entire decade.

#### **HUC Gets One More Unit**

During the fall of 1961, the Utilities addressed concerns about the "drastically increased firm light and power requirements" of the town. Companies, especially Minnesota Mining & Manufacturing (3M), were installing more equipment that consequently required more power generation. To combat the growing energy needs, the Commission decided to increase the plant's firm generating capacity; they needed to install another engine. The Commission made its first move with hiring their go-to engineering firm of Buell & Winter for the procurement of an engine as well as devising plans for the Electric Service Building. A representative of the firm presented three companies' offers to the Hutchinson Utilities Commission. After some discussion, the Commissioners accepted Nordberg Manufacturing Company's bid to provide a dual engine unit (meaning that it was equipped to generate with either gas or oil) with the net capacity of 4,500 kW. This generator had a capacity of more than twice of the plant's two largest engines. While costs amounted to \$593,685, Utilities officials estimated that the addition of this new engine would eventually result in substantial savings for the plant. With this purchase, the Utilities needed to find a way to finance as well as to create a space for the new engine.



Improvements and extensions to the Electric Plant were vital and neither could be done without proper funding, the aggregate sum totaled to \$975,000. The estimated amount was to pay for suppliers of equipment, the engines, supplies such as the engine and a cooling tower unit, construction of a new electric service building, and additional engineering services. After conducting their own research through surveying the municipal revenue financing market, conferring with local bank officials, and evaluating the market price for current borrowings of similar amounts, the Commission decided to employ the Carleton D. Beh Company, an Investment Securities Firm, to be fiscal agents for HUC. A large purchase such as this required funding outside of the Utilities' surplus net revenues. Instead, they needed to issue and sell electric revenue bonds, \$700,000 worth of revenue bonds to be exact. After advertising at a public sale, the bonds were sold to the most favorable bid, put forward by Paine, Webber, Jackson & Curtis of Minneapolis. Soon after, the building expansion commenced.

# **Money Matters**

Financially speaking, the Utilities, especially the Electric Plant, were doing exceptionally well. Total assets surpassed \$3 million for the first time and the plant was currently debt-free. Yet, the Utilities was preparing to incur costs due to the purchase of the Nordberg engine. Posting an impressive record net income of \$200,601.16 for 1961, the Electric Plant saw a gain of almost \$87,000 from the previous year. This said increase was by virtue of using natural gas part-time in two of the plant's diesel engines; the savings accrued were due to the fact that the cost of gas was approximately half of fuel oil. Proving its financial vitality to the community, Hutchinson's flourishing municipality continued making contributions to the City while other electric municipalities were floundering across the nation.

# Reasserting the Efficacy of HUC

Despite its stellar record, the Utilities Commission and its purpose were questioned, not once, but twice by city officials. The first instance took place in 1962 at a City Council meeting. In response, the Commissioners asserted that the Utilities Commission was purposely made a strong, separate unit of government upon evaluation of Hutchinson's amended Home Rule Charter (adopted on June 1, 1913, and later amended in both 1936 and April 26, 1955) and that it should remain so. To keep the Utilities from being entangled in town politics, the City Council was only bequeathed two powers in regards to the Commission: appointing the Commissioners to six-year terms and to veto suggested rate changes by a 4/5 vote. According to provisions found in Chapter 17 of Hutchinson's Home Rule Charter, the Commission was granted, "full, absolute and exclusive control of and power over the City light and power plant...and authority to extend, add to, change and modify the light and power system and do any and all things deemed necessary and proper for the operation of the plant." Upon hearing the Commissioners' arguments, the City Council members conceded to HUC's wishes and upheld the original powers bestowed to the Council (i.e., did not extend their authority). The other occurrence happened later in 1965. Hutchinson's Charter Commission was considering revising certain provisions, including those that established and regulated the Utilities Commission. Honoring requests of the Charter members, the Commissioners created a list of recommendations. The main concern of the Utilities was to ensure that it was empowered to act "intelligently and efficiently" while overseeing the receiving and

distribution of electrical energy and natural gas, since both industries involved substantial expenditures that oftentimes needed to be made on short notice. Hence, they wanted to maintain that there would only be three members who served long terms; this was to provide Commissioners enough time to do "on-the-job-training" and to familiarize themselves with problems of running a municipal business. Also, the freedom of conduct for the Commission was imperative to the successful operation of the Plant. Their last recommendation was in regards to preserving the voluntary obligation of the Commission to contribute available funds to the City; reasons for this was that HUC wanted to continue in its policy of efficient operation, which meant that monies had to be spent to conduct up-to-date maintenance without monetary restrictions. Heeding HUC's recommendation, the Charter Commission's further questions in regards to the running of the Utilities were silenced.

# Giving Back

Keeping with the Utilities' mantra to serve the economical needs of the community, the Commissioners carried out two monumental deeds within a year of each other. In the early months of winter, the Utilities Commission requested to lower the electric rates for the first time in 1965. Superintendent Ralph Young stated that the rates would fall to what they were in 1948. Utilities customers were to see savings averaging 4.5 percent. This act demonstrated the Utilities' lack of concern for profits and rather their interest in perpetuating the affordability of their services to customers. The other event occurred during the beginning of the new year, 1966, in which the annual contributions that the Utilities had made to the City totaled \$1,006,137 after the presentation of a \$10,000 check. After 29 years the Commission had doled out at least \$10,000, in yearly fashion, with the exception of 1944. These contributions remained voluntary obligations that were accorded to the funds of the City.

EFFECTIV	E 4-1-65
HUTCHINSOI Municipal Elec	
RATE SC	HEDULE
10% Penalty if not Paid b	by the 10th of the Month
RESIDENTIAL RATE	COMMERCIAL LIGHTING RATE
First 40 KWH per month	First 50 KWH per month8¢ per KWH Ncxt 100 KWH per month5.5¢ Next 350 KWH per month4.5¢ per KWH Next 1000 KWH per month3¢ per KWH Next 1000 KWH per month2¢ per KWH Next 2500 KWH per month1.5¢ per KWH Over 5000 KWH per month1.6¢ per KWH
ELECTRIC HEATING RATE  First 700 KWH at Residential Light Rate  Excess at .013 per KWH	The average price per KWH under this rate shall not be less than 2¢ net per KWH.  MINIMUM NET BILL, per month\$1.00
	POWER RATE
WATER HEATING RATE  All KWH per month	First 200 KWH per month
COMMERCIAL HEATING RATE	Next 8000 KWH per month3¢ per KWH Over 10000 KWH per month2¢ per KWH
First 200 KWH per month4¢ per KWH Over 200 KWH per month3¢ per KWH	MINIMUM NET CHARGE PER H.P. 1.00 per month for first horsepower .50 per month for over horsepower
MINIMUM NET CHARGE: \$ .50 per KWH of connected load.	The average price per KWH under this rate shall not be less than $2\phi$ not per KWH.
MINIMUM NET BILL, per month\$2.50	MINIMUM NET BILL, per month\$1.00

#### **HUC Becomes Interconnected**

As the community continued to grow, the Commission sought to alleviate any strains on the supply of electricity. They found their answer in forming a relationship with a company known as the Rural Cooperative Power Association (RCPA was later absorbed into the United Power Association, which today is known as Great River Energy) during the trying times of the mid-1960s. RCPA approached HUC to see if they would like to connect to its large transmission system, which would enable Hutchinson to share in the economies of an integrated electric network. Electric transmission is a system through which electricity is transported over long distances to consumers. This arrangement is commonly referred to as an "interconnection" among two or more parties. A transmission system connects the power flow of lines through a power grid of interconnected transmission lines. As the demand for power increased, the power that Hutchinson customers would receive would come from any number of RCPA's power plants or stations. Both parties signed an Interchange Agreement that determined which party was to be responsible for the maintenance and/or operation of any shared equipment. It announced that both parties intended to collaborate to actualize the main objectives of the Utilities' mission: "greater efficiency, increased service reliability and the reduction of power costs." The Commissioners agreed to the stipulations that they would not interconnect nor buy electricity from anyone else. lxiv This was the beginning of a long and fruitful accord between the two parties that is still in existence today. Less than three years later, 1968, the Utilities and RCPA added a supplement to their original agreement in which the Commissioners assented to construct a 69 kV loop and add a substation to improve the operation of their interconnected systems.

#### Growth in Hutchinson

Adding the Nordberg unit to the growing fleet of engines was not enough to satisfy the town's thirsts for electricity in 1966. A surge in the community's population coupled with the increased demand required by commercial businesses, such as the Minnesota Mining & Manufacturing Company and the newly created Hutchinson Industrial Corporation (now known as Hutchinson Technology Incorporated or HTI), commanded the Utilities' attention. The Electrical Department's first course of action was to order transformers and switchgear equipment to raise the plant's distribution to 13,800 volts; E. A. Pedersen Company would furnish the work and materials for \$111,400. After retaining use of one of the original and old McIntosh-Seymour engines for three decades, the Commission decided that it was time to retire unit #3 as well as the oldest Nordberg engine. Another two electrical generating units were needed. Once again, the Utilities was looking to purchase engines that possessed a dual fuel capacity via the public bidding process. Afterwards, the Commissioners agreed to purchase two 4,000 kW Worthington generating units to be placed in the other units' stead. These large purchases required another plant expansion (the last one had just occurred in 1962) and were to be funded partly from the Commission's half million dollar reserve fund as well as from revenue bonds; no tax levy was required.

#### Ramifications of War

All of these plans were tested when Communism fanned throughout the world and manifested itself in North Vietnam. While the military conflict began in 1955 and the United States did not get

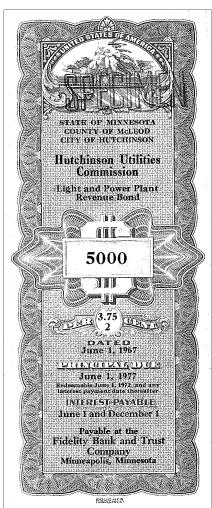
involved until the early 1960s, the war did not directly affect the daily routines of the Utilities until the end of 1966. It was brought to the Commissioners' attention at a monthly meeting that they were facing a potentially severe shortage of equipment. To their detriment, much of the material and equipment needed for the diesel engine generators, electrical installation, and wiring for the switch gear equipment and plant was in extremely short supply; so much so that the expected delivery dates were at least 38 to 42 weeks behind schedule. Furthermore, it was pointed out that all the planning and engineering would not be completed until March of 1967. It became possible that the supply of materials could become frozen due to escalating war efforts; this would in turn prolong and jeopardize the timeline of obtaining plans, calling for bids, and actual completion of the energy expansion project. Ixvi Declaring a state of emergency, the Utilities Commission announced that they were forgoing the proper bidding process and instead were moving hastily because of impending time restrictions that were caused by the Vietnam War. Consequently, they hired E.A. Pedersen Company to furnish the labor, material, and equipment necessary to complete the installation of the diesel engine generators, electrical installation, and wiring. Plans were immediately put into action to start on improvements to the Power Plant.

# Bidding for Additions to the Infrastructure

Continuing the cycle of plant expansion, the Commissioners looked to the Carleton D. Beh Company to act as their fiscal agents and prepare the sale of another \$700,000 bond issue. Within a few weeks, a 'Notice of Sale' was advertised in many publications, including the local newspaper. Administering public, or open, bidding processes was vital to the profit margins of the Utilities because it fostered a spirit of competition among the potential bidders that usually resulted in prices being slashed. Lower bids directly resulted in savings for Hutchinson Utilities' customers. For this occasion, the most economical bid that was proffered came from Worthington Corporation. Upon receiving the base price and estimates for the building expansion project, the charges totaled \$1,360,000. The construction and expansion consisted of the installation of two 4,000 kW Worthington dualfuel engines, provision of engine foundations and building alterations, installation of transformers, distribution panel boards, and control wiring, interconnection between generators and switchgear, and other "incidental" costs. Hereinafter, the engines soon arrived and work commenced on the plant expansion project.

# Filling a Leadership Void

During these trying, albeit exciting times, something was absent from HUC. A revelation was revealed at a Commissioners'



A specimen of a Revenue Bond from 1967.

monthly meeting; the men realized that the Utilities currently did not have a sole individual to lead the two divisions. Someone was needed to oversee all of the business activities while remaining subject to the supervision of the Commission. After the creation of the Gas Division, vested powers were divided between two men running the two separate divisions (prior to having municipal gas, the Electric Plant was run by a superintendent). R.E. Young, the Electrical Superintendent, was formally appointed to be the very first General Manager of the Hutchinson Municipal Utilities. The tradition of having a general manager has continued through to this very day.

# A Proposal from the State

Throughout the latter part of the decade and well into the next, the Utilities was repeatedly confronted with the issue of rate increases by a state entity, especially for natural gas. One such matter happened in the spring of 1969, when a proposition, by the name of Capital House File #1681 and Senate File #1478, suggested that the state was to be able to regulate the powers and operations of public utilities, including the setting of rates of Minnesota Utilities. Holding steadfast to its customers' wants and needs, the Utilities Commission staunchly opposed the files' passage because they saw it as a potentially devastating blow to the welfare of the citizens of Hutchinson. By the rules set in Hutchinson's Home Rule Charter, in which the Commission was granted ownership of both the Electrical and Gas Distribution systems of Hutchinson, this new law would have relieved the Commissioners of their appointed duties, namely to operate the two departments in the best interest of the city's citizens and to set reasonable and affordable rates. Fortunately, the files were defeated and local utilities across the state carried on in their self-governing ways.

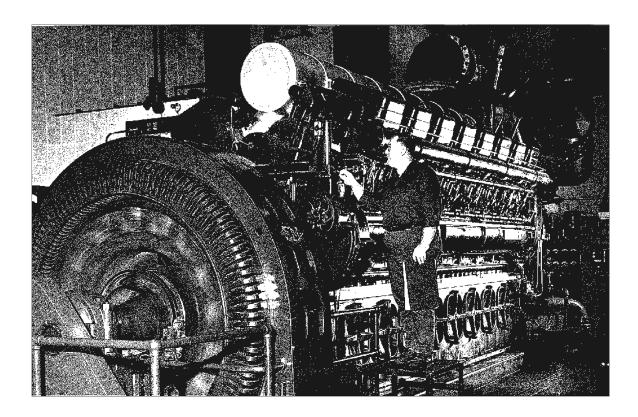
# The Perpetual Demand for Energy

In spite all of the Commission's moves to quell the energy scarcity, the mounting electrical needs of the town could not be stopped. Seeming like a competitive sport, the community would grow and the Utilities had to counter with a play that resulted in the increase of distribution. A headline in the Hutchinson Leader declared that McLeod County had an 11.3 percent population gain since 1960; it was only 1968. The growing demands were most aptly demonstrated when Hutchinson's local high school energy needs increased. As the school's demand multiplied, HUC had to respond with a three-fold voltage increase, from 4,160 to 13,800; consequently, the Utilities responded by obtaining another transformer to support the school's growth. Through discussions with the Rural Cooperative Power Association of Elk River, they agreed to construct a transmission line (69 kV) that would furnish additional electrical service. This line was going to connect RCPA to Hutchinson and Litchfield as part of a \$2 million project of constructing new transmission facilities during 1968.

Another round of growth tested the Utilities' services when Minnesota Mining & Manufacturing made two requests in the winter of 1968 to 1969; first was for a 3,100 kW increase in load at their plant in Hutchinson. The latter was that they were planning to increase their demand by 1970 from 6,200 to 12,000 kW. Because of this the acceleration of construction plans by 3M, among other large power consumers, HUC determined that it needed to survey the community to get a more accurate picture of the anticipated levels of generating capacity. When the results were tallied, it was discovered that there

was an abnormally high load growth. In reaction to the survey's outcome, the Commission realized that they needed to procure the proper equipment to handle the power demand; otherwise they risked a power outage by the following summer if any major generation equipment failed.

Through each tactical maneuver, the Utilities always addressed the energy concerns in the best possible manner. Yet, a much more substantial purchase was needed to adequately satisfy the mounting needs of Hutchinson's businesses and citizens. With the dawn of the new decade, the most spectacular of the Utilities' plans was about to unfold.



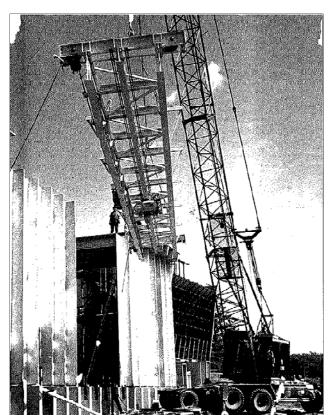
An employee hard at work on one of the Plant's units.

# **Chapter 8: A Decade of Difficulties and Perseverance**

A war, crisis, wage freeze, fire, and litigation issue are just a few of the items that the Utilities had to contend with during the 1970s. In the midst of these difficult times, HUC gained another turbine, a propane-air peak shaving plant, hired a new general manager, and moved to a new location. Undoubtedly, this was the busiest decade for the Commission board yet; each passing year had at least one remarkable event take place. While the decade began on an extremely exciting note, the ending of these 10 years bore witness to many inquiries and challenges from the public sector. Regardless of questions surrounding its effectiveness at the conclusion of the decade, and all the other formidable hardships they faced, the men and women of the Utilities persevered during hard and sometimes troubling times.

# HUC's Need for another Unit

An unparalleled purchase was needed to properly address the Utilities' energy concerns for the upcoming years. Tentatively, management had planned that they could wait to purchase additional equipment until 1975, but due to the anticipated power needs required by local industries, the Commissioners had to hasten. Presently, HUC had been buying power from RCPA; however, RCPA's supply had become increasingly tighter. Near the end of 1969, the Commission's plans were put into motion to acquire a new gas turbine, one larger than ever before. After the reception and careful



Expansion construction at the downtown plant.

consideration of seven bids from five companies for a gas turbine, the Commissioners settled on accepting the bid of General Electric (GE) Company's 15,000 kW combined cycle gas turbine unit in early 1970. While GE's bid was by far the highest, General Manager Young explained that a gas turbine should have a life expectancy of no less than 30 years. Furthermore, the unit's lower fuel costs would offset the extra purchase price; it was found that the future cost of operation for the GE turbine over a period of 10 years actually made it the least expensive of all the bids. Lurrent capacity of the plant was 20,780 kW; the GE unit would increase the capacity of the present equipment by a staggering 67 percent. With this colossal purchase, a new generator building was needed to house the unit. R.L. Vogt, Inc. of Olivia, Minnesota had the winning bid of \$185,670 and was hereby appointed the task of

erecting a building for the generator. Since the total estimated cost for the expansion amounted to the

stunning sum of \$2,942,657.75, the Commissioners once again had to sell \$2,000,000 of Revenue Bonds to provide the funds for the completion of contracts covering the addition to the building, a new well, pump, the GE unit, and engineering fees. It went on-line in 1971 and quickly became the workhorse of the plant, running constantly as the other generators were activated during peak electric usage. While the Utilities started off the decade on a historical note, the country was riddled with economic problems.

# President Nixon's Wage Freeze

Amidst a period of raging inflation, President Richard Nixon unleashed an action that was

unprecedented. For 90 days, in the autumn of 1971, there was a federally imposed price and wage freeze. National economic conditions had worsened over the past decade; the inflation rate, which had been at 1.5 percent at the beginning of the 1960s, had ascended to 5 percent and unemployment levels rose from 3.5 to 5 percent. lxxvi Hoping that this measure would successfully combat the growing inflation rates while easing the unemployment dilemma, all sectors of the country were forced into compliance, even Hutchinson Utilities. Ixxvii This measure caused a delay in the passage of the Commission's proposed new rate plans. Not once since the plant's inception of the Natural Gas division had there been a rate increase to Hutchinson consumers. Yet, for the past 11 years, Northern Natural Gas had occasionally opted to raise the rates to its municipal customers. Hence, a rate increase adjustment was deemed necessary by the Utilities' staff. While the increase was approved by the City Council, it had to be delayed by three months, in conjunction with the Presidential policy, resulting in a further loss of income for the Utilities. In addition, a couple employees were affected because they were

,
RATE SCHEDULE
Adopted for Hutchinson Natural Gas Division
December, 1971
RESIDENTIAL & SMALL COMMERCIAL (FIRM) Minimum Charge — \$1.75 per meter per month First 500 cu. ft. per month per MCF
LARGE COMMERCIAL — A Firm Customer that has facilities (FIRM) which will use in excess of 200 MCF per month
Minimum Charge — \$3.60 per meter per month First 3,000 cu. ft. per month per MCF
SMALL INDUSTRIAL (Interruptible Service)
Minimum Charge — \$2.00 per meter per month  First 7,000 cu. ft. per month per MCF
Balance

scheduled to receive raises, which were also included in the national freeze. Fortunately, the price controls were relaxed after the 90 days drew to a close.

# Solution Found to Natural Gas Shortage

Natural gas was in short supply during the winter months of 1971 and 1972 while gas consumption was on the rise in town. The Utilities had a contract demand with Northern, which stipulated that if HUC went over the contracted amount, HUC would have to pay a significantly steep fee. After a failed attempt to purchase more gas from Northern and to avoid future expensive

payments, the Commissioners requested Gas Superintendent Kuiken to investigate other, more affordable means of providing natural gas to customers. The ensuing project was spearheaded by Kuiken in which he first enlisted an engineering firm to secure information on the costs of building and maintaining a peak-shaving plant. It was found that many gas utilities and consumers could gain enhanced security and flexibility while reducing the overall costs of energy supply when they possessed such a plant. Basically, the peak-shaving plant would supplement the natural gas supply with propane gas. It was more cost-effective to peak-shave with propane and air pumped into the system to make up for the lack of natural gas than to pay the costly ramifications of going over their contracted amount, time and time again. Commissioners soon instructed management to contact an attorney to draw up the proper papers for a transaction of land adjoining the Border Station, located on the northern edge of town near Burns Manor. Discoil After accepting the winning bid submitted by Energy Systems, Inc. of Eden Prairie for \$136,300, construction of a propane-air gas plant began. While concerns about gas supply were assuaged, the costly addition of machinery exacerbated the Utilities' fiscal concerns. Some sort of action was needed to defray these high costs.

#### **HUC Seeks a Rate Increase**

A common complaint lodged against Utilities and other providers of services rendered to the public have been the supposed arbitrary increases in rates charged to customers. Often deemed too high or occurring too often, rates were and are often contested and this was the case for Hutchinson Utilities in the spring of 1973. General Manager Wacker reasoned that even though the Utilities had added more efficient equipment, such as the GM turbine unit and peak-shaving plant, this efficiency had not deterred the rising and volatile costs of fuel. Inescapable, the problem needed to be addressed and HUC personnel thought it was best amended through passing a proposed 10.6 percent increase in electric and gas utility rates; despite this recommended upsurge in rates, those charged by Northern States Power Company were much greater. Raising rates were not a common fixture in the Utilities' history and were only used as a last-resort option. While the City Council "balked" at the proposition, Utilities President Howard P. Quade, explained in a letter that it was vital to insure adequate revenue to cover the costs of plant operation and maintenance, have a surplus fund for replacements, provide for customary improvements, and to share a portion of the net income to the City in lieu of taxes. Quade had an arsenal of reasons to support the Utilities' position; he stated that numerous factors were currently inhibiting the proper profit margins for the Utilities. Among these rationales were the increased cost of fuel oil, which raised 21 percent in four years, in a span of five years the cost of natural gas had swelled by 43 percent, a 20 percent spike in the cost of materials had occurred for both the natural gas and electric divisions, there was a steady decrease in gross revenue for electricity and natural gas by at least 1.5 percent, and lastly the growth of Hutchinson surpassed the national average of 10 percent that in turn meant a perpetually increasing demand for the Utilities' services. In conclusion, Wacker recited the fact that the last electric rate change had occurred in 1953 when a modest surcharge was put into effect. Suppliers, such as Northern, indicated that there would be approximately a 10 percent increase per year in fuel cost for the indefinite future. The fickle, increasing price of fuel coupled with the time-consuming process of passing cost modifications (known as rate changes) greatly affected the cash flow of HUC. Needing to find a resolution to this predicament, the

Utilities found their answer in computing a fuel cost adjustment figure. Through this adjustment calculation, the Commission was able to modify the power fuel costs. It was a much more flexible method of calculating costs. The adjustment was based upon the cost of fuel or electricity used in the generating plant or the border station. While the energy price roller coaster necessitated this HUC solution, the overall objective of the Utilities remained the same: to furnish electricity and natural gas at the lowest possible price to consumers. All rate changes were still subjected to the City Council's approval. Through the persuasive efforts of the Utilities Commission and its management, the City Council members conceded and approved Wacker's rate increase. An updated version of the computation, with the implementation of a power cost adjustment clause and the fuel cost adjustment clause, exists today. With one financial success behind them, the Utilities faced another quandary dealing with the shrinking supply of fuel.

### Conservation is Encouraged

Energy and fuel shortage woes plagued the year of 1973. HUC was the recipient of some disheartening news when they were informed that a major fuel supplier had cut supply by 25 percent. While this information was unfortunate, it did not disconcert the Utilities. Fortunately, because of management and the Commission's strategic planning, the possession of the GM turbine unit, and peak-shaving plant prevented the Utilities and its customers from feeling more of an energy pinch. However, Utilities' management felt that the public could get involved through helping avert another potential cutback in supply through conservation efforts. Utilities' customers, both large and small, were advised to try to conserve their use of heat and electricity. Long before it was fashionable to conserve energy, HUC had an ad published in the Leader that provided tips on how to save power. Some solutions given were to insulate exterior walls, install storm windows and doors, change heating filters, and turn off unused lights; all of these items are still viable and useful ideas for today. After accounting for each seemingly small act, the totality of rate payers' conservation actions proved that energy preservation could make a substantial difference.

### A Record in Production

Between intermittent periods of energy dearths, the Utilities broke yet another record in production. A new peak load demand was attained during the hot month of August, when production reached 23,500 kilowatts per hour (kWh), up from the record previously set during the prior summer with a production of 21,900 kWh. This was a 7.4 percent increase. Because HUC had garnered a reputation for its efficiency and had acquired new equipment, they had no problem in keeping up with the demand. The Utilities were even able to help offset potential shortages in other areas by supplying power to the United Power Association, which then supplied it to the Northern States Power Company through a "power pool" in the state. Despite their success, management still reiterated the message for public and private energy conservation in hopes that the advice would resound in customers' ears.

# The Oil Embargo of 1973

The hiccup in energy supply for HUC preceded an international oil crisis, which transcended borders and affected nations dependent on the continual supply of oil. Members of the Organization of Arab Petroleum Exporting Countries (better known as OAPEC), suppliers of crude oil, made an announcement in October of 1973 that they were abstaining from the shipment of oil to countries that had supported Israel in the Yom Kippur War. | This oil embargo was mainly aimed at the United States, whose relationship with the Middle East had become precarious after America resupplied Israel's military forces with weapons and arms. Exacerbating the problem, a different aggregation of nations known as the Organization of the Petroleum Exporting Countries (OPEC) started to wield their powers and raised the price for oil by 70 percent, which caused the price of a single barrel to soar to \$5.11 per barrel that in turn, wreaked havoc on industrialized nations. Many countries, including the United States, had come to rely on OPEC as their principal supplier. Much to the chagrin of utilities all across the country, energy shortages began to proliferate. A plethora of vehicles sat idle in garages while long lines of commuters enveloped gas stations; images of abandoned highways permeated the country's newspapers. In spite of this abysmal hardship, HUC remained unflappable. The Commissioners were able to turn to UPA for extra allocation of power if needed because UPA's power was primarily generated from coal. In wake of the national fuel shortage, the City Council authorized a cutback of downtown street lighting and floodlights by the dam, especially during the holiday season. Even before a Presidential address about a national energy program was aired on television, there were visible efforts by the local government, industries, and citizens alike to conserve energy by lowering their thermostats and cutting back on the usage of electricity. 3M alone had a goal to reduce fuel usage by 10 to 15 percent. The Utilities did not face a severe crisis due to a wonderful partnership between the Utilities, the City Council, and the cooperation of citizens and companies. This triumph over adversity could be attributed to the stellar planning of the Utilities' employees. General Manager Wacker proclaimed that, "We're in better shape (for power and natural gas) than many communities because of past moves by the Commission, such as the peak shaving plant, but we should still take steps to conserve what we do have". | Fortunately, the embargo was lifted in the spring of 1974 and the Utilities emerged from the turmoil unscathed.



The situation for gas and its minimal supply grew dire. This is just one image that captures the severity of OPEC's actions and the detrimental affect it had on the nation. Image courtesy of http://mentalfloss.cachefly .net

# **HUC Peak-shaves for another**

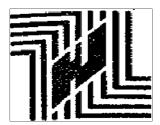
In the aftermath of the oil crisis, the Utilities sought to stave off further vulnerability to the whims of OPEC and Northern's recurrent rate increases. HUC evaluated different measures to help ensure they could accomplish an optimization of gas usage. Some preliminary ideas surfaced at the end of 1973 regarding entering into a natural gas agreement with the community of Circle Pines, MN. Circle Pines had also been paying higher penalty fees to Northern for numerous years. Mutually, the two parties desired to make more efficient use of their natural gas purchases. Both entities would purchase natural gas under a group billing; it was a maneuver to save substantial amounts of money for both towns. Each city's demand peak were at different times; this was advantageous because it prevented either community from having to buy extra gas during its peak periods, thus eradicating the paying of higher rates that Northern would impose during peak gas usage. xc HUC was allowed to use natural gas from Circle Pines in the Utilities' generating plant during the summer while, in return, the Utilities would peak-shave for Circle Pines during the winter months and allow them to purchase any residual amount of gas. This arrangement evolved into a joint-agreement that was signed into existence on April 2, 1974. It also gave birth to the Circle-Hutch Utility Board which was responsible for everyday operations. By entering into this arrangement, the Board was empowered to make more efficient use of their natural gas purchases. Offsetting another financial pinch through embarking on a relationship with Circle Pines allowed HUC to soften the blow of future rate spikes to Hutchinson's energy consumers.

# The Big Move

After some trying months the Utilities were on the move, literally. HUC purchased over 31 acres of land and an 18,400 square foot building in Hutchinson's Industrial Park that was to be transformed into their new office quarters and gas/electric warehouse facilities for \$225,000. Relocating to Michigan Street was a tactical and pragmatic move to insure that HUC had land aplenty for future expansion. Management felt that additional electric generation should not be located at the present power plant location (newly minted Plant 1) since the building had already been the site of multiple expansions and land for future improvements was becoming increasingly scarce downtown. While Plant 1 would remain at its present location, the main office, truck parking, material storage, meter test and test repair shop, electrical and gas maintenance and distribution crews, engineers, customer services, and bill payments were all going to be housed on the same piece of property at 225 Michigan Street. Prior to this, the main offices were located on Main Street, Plant 1 was at the juncture of Highway 7 and 15, and other equipment were scattered across the city; inevitably, communication problems had become prevalent between the various departments as a result of their separate addresses. Equipped with both a drivethrough and lobby, the Commissioners felt that the newfangled office building would not only make the Utilities more accessible and efficient, but that it would actually promote a better experience for customers. xci Even more so, this move alleviated the stresses that had plagued workers and planners when they tried to determine where additional electric generation would need to be erected at Plant 1; the environmental and accessibility quandaries posed by attempting to build in residential and public areas were abolished when the men and women of the Utilities moved into their new home.

### **HUC Gets a Loop Line System**

The motif of growth was continued during 1975 when the Utilities made forays into procuring a cheap and economical solution to their energy dilemma. Once again, the city was undergoing another growth spurt. HUC needed to find a more modern voltage that would adequately and reliably deliver energy to residential and industrial customers alike. Possessing a 4.16 kV system that had been at capacity for quite some time, HUC needed to expand its distribution system to encompass the rising load growth. Fortunately, the electrical department found its solution, a 13.8 kV loop line system. A loop is a big circle of heavy conductor (wire) that can be tapped in several areas. Consisting of a north and south loop, the lines tied the two sides of town together through the installation of large, underground conductors. HUC personnel now had the ability to energize distribution feeders (also known as loops) from different directions if there was ever an underground wire fault. These loops were installed to serve two functions, one, to move large blocks of energy during abnormal conditions and two, delivering energy to large customers. Construction was divided into four phases, with the entire project concluding in five to six years. Since the loop line's inception, the two main loops have been incorporated into several smaller feeders but still have the ability to tie together from several directions. Currently, there are a total of 19 loop lines in Hutchinson.



Hutchinson Utilities' logo, circa 1976.

### A Relationship with Curtiss-Wright Begins

Relocating to the Industrial Park allowed the Utilities to once again enter the market to purchase another turbine that would hopefully satisfy the unremitting energy cravings of its customers. After the bidding process was over, the Utilities agreed to purchase a 22,080 kW turbine unit from Curtiss-Wright Company (C-W), with a Rolls Royce Olympus generator, for \$2,839,778.\*\* Presently, the Utilities had 32,000 kW of base load dual fuel (oil and gas) electrical generating equipment, which consisted of diesels and the industrial GE unit. With the acquisition of the new unit, potential total generation of the plant was bolstered to a staggering 52,000 kW. Not only did the expansion meet future projected needs of the community, it also included a proposed increase to the load growth and a 15 percent generation reserve; leaving the Utilities with a generation surplus capacity of 14,000 kW.\*\* Another motive for the installation of a combustion turbine electrical generating unit was to serve the needs of the newly expanded United Power Association; the Rural Cooperative Power Association and UPA merged in 1972. With power exchanging hands between the two associations, UPA resumed RCPA's role in the Interchange Agreement of 1965 with HUC. UPA's load projections indicated that they would have insufficient generation reserves by June of 1977, which would have badly hampered the company's supply of energy to other utilities. They turned to the Utilities in hopes that they could purchase HUC's

excess kilowatts. Fortunately, HUC planned to have its unit operational by the summer of 1977. Because HUC held a selling status and UPA was in a purchasing position, the two parties amended part of the Interchange Service Agreement on February 20, 1976, which they signed originally in 1965. Hence, the energy abundance led to UPA agreeing to purchase the #9 unit capacity until demand in Hutchinson climbed so high that it needed to be used locally. The C-W purchase coalesced with the present distribution loop system improvement program precluded the necessity of any additional expensive distribution expenditures. \*\*Exception\*\*

The ravenous hunger of the Utilities' consumers subsided with this recent purchase, yet HUC's relations with Curtiss-Wright were about to unravel quickly. Complications with the C-W turbine began to surface in June of 1977, just within months of when the turbine went on-line; the C-W unit known as unit #9 started to have problems with its oil consumption and also had a vibration issue. xcix Fortunately, the dilemma seemed to dissolve by November following proper actions taken by Utilities' workers.<sup>c</sup> Both issues remained under observation. A few weeks came and went when the unit failed. Due to the severity of the damage, HUC had to discuss with UPA about the best course of action to take. Since UPA depended on unit #9's supplemental supply of power for the upcoming winter and it was imperative to maintain a steady source of electricity, all parties were in favor of having a complete and permanent repair initiated rather than having Curtiss-Wright render a temporary fix. General Manager Rufus Alexander (he was hired on September 1, 1976) was instructed to implore Curtiss-Wright to insure that a permanent repair could be completed in the shortest time possible. ci To HUC's dismay, a representative from C-W declared that they were unable to conduct the repairs immediately because of a pending strike within the company. While at a Commissioners' meeting, a representative confirmed that it was impossible to commence work before April of 1978, which was a waiting period of at least four months.cii Later, that date was further postponed when C-W estimated that the unit would be back online during August. An emergency generator was installed in July to inhibit further complications. Unit #9 was out of service for a considerable amount of time during the rest of the year because of warranty work that had to be done in order to replace the defective vibration component. Due to this string of incidents with C-W, the Utilities was strongly advised by engineers at Associated Consultants to opt for an extended 12 month warranty on the C-W turbine; the Commissioners followed the advice. ciii Unbeknownst to the Utilities was that this would not be that last stressful dalliance with the Curtiss-Wright Company.

### Trouble at the Downtown Plant

One of the most trying, albeit unforgettable, episodes in the Utilities' history came to pass just after the New Year. On a typical Wednesday morning in January, with temperatures hovering at 10 degrees below zero, flames suddenly engulfed the switchgear building, adjacent to the downtown plant. While the fire devoured rubber-coated wiring in the structure, black smoke permeated the sky. Within minutes, a pall of darkness and silence enveloped the city, as lights went out and furnaces became still. The ensuing hours and days surrounding the fire of January 10, 1979 tested the resiliency of the Utilities' workers and management; it took all the guile and hard work that these men and women could muster. General Manager Alexander traced the source of the fire to troubles with an underground cable at the

intersection of 5<sup>th</sup> Street and Lynn Road. As Utilities men were preparing to repair said cable, the automatic switch did not open, which consequently overheated and set the insulation of the wiring on fire. <sup>civ</sup> Providentially, neither the high-voltage transformer station nor the 360 million gallons of oil in tanks situated near the switchgear building were damaged. Yet, the fire had a domino effect on the community: it destroyed the switchgear building, triggered a city-wide power outage, and caused malfunctions in emergency power supplies. While the outage lasted for about an hour throughout the entire town, its effects lingered through the next afternoon in the northeast part of the city. At the outset, the blackout ironically prevented the fire alarms to hark all volunteer firemen to the scene. As soon as the firefighters arrived, they dispensed chemical foam, provided by 3M, to successfully combat the fire. <sup>cv</sup> All the while, Utilities workers were working at a feverish pace trying to remedy the problem while being subjected to temperatures plunging to minus 20 degrees. This was only to be the beginning of the Utilities' troubles.

The aftermath of the fire and blackout served as a terrific testimony to the quality of not only HUC's workers and services, but to the amazing aid provided by companies both near and far. Within two days of the fire, help poured in from all around the state and country. Two technicians from the Harold Scholz Company, based in Omaha, Nebraska, installed temporary breaker equipment while crewmen from United Power Association (UPA) assisted in restoring and providing electric service to the community by the morning of January 11.<sup>cvi</sup> These men hailed from Cambridge, Princeton, Mora, and Grand Rapids. Due to the overwhelming influx of assistance offers, HUC had to decline many utilities' offers. When asked how the workers responded to the situation, General Manager Alexander beamed, "There's not enough I can say about our own boys here and the UPA." Power being generated at both power plants in Hutchinson resumed, but almost 50 percent of energy being used was bought from UPA. In reaction to the current circumstances, General Manager Alexander implored the public to practice conservation in hopes that the strain on the supply of energy would be assuaged.

#### In the Fire's Wake

Immediately, the Commission sought to restore the switchgear building in the most expedient manner through replacing the marred equipment. Only three breakers were temporarily operating outside of the fire-damaged building following the discovery that 11 breakers had been lost to the flames. After scouring the country for breakers, HUC accepted an offer from the Harold Scholz Company to install six breakers (large switches) in cubicles, plus an additional breaker for \$129,000. Delivery of these items was expected to take four weeks. The company also offered to furnish six more breakers in the remaining half of the building for \$114,000. Each of the breakers weighed in at a massive 1,400 pounds and took six months to build. Through an act of serendipity, some breakers were already being manufactured by General Electric for a municipal plant in Nebraska; auspiciously, the town had a contract with the Scholz firm. Due to this connection, the officials of Blair were benevolent enough to release the equipment for installation in Hutchinson. Expressing gratitude, General Manager Alexander proclaimed, "We're so very, very fortunate". It was good fortune because as a common practice, no companies carried breakers in stock; instead, breakers were built upon receiving an order and required at a minimum, six months to manufacture. As part of a new effort to eliminate any further possibilities

of fire at the site, the Utilities coordinated to have a fire wall installed between the two groupings of breakers. While originally priced at \$225,000 when the switchgear building was first built in 1967, it was going to cost at least \$18,000 more to refurbish the site and bring it back to a proper condition.

# A Change in Public Opinion

Throughout the beginning of the ordeal, the Utilities' customers were supportive and understanding that HUC had not been negligent and that the fire had purely been an accident. The tide of emotions began to sway when angst began to surface in the town following attempts to synchronize the production system, which caused a barrage of power outages throughout the town in the weeks following the blackout. Repairs were made, new equipment was installed, and a breaker arrived to get a generating unit in the downtown plant (plant 1) running. When changes were made, power was cut. Yet, these isolated incidents were perceived among some city residents as not only annoyances but saw it as a poor reflection in the efficacy of the Utilities. Less than a month after the first blackout, another longer blackout supervened; six hours of darkness descended on the south and southwest parts of town following a re-closure of equipment that had been serviced by three Utilities' workers. Unfortunately, while the men were working, things went terribly awry when the equipment malfunctioned, thus injuring the three employees. The culmination of these events turned some citizens' angst into a dark cloud of public doubt that shrouded parts of the community.

After a multitude of rumors had circulated around Hutchinson in regards to not only the handling of the fire crisis but also the reliability of electrical service, the City Council felt compelled to fulfill its public duty and confront the Utilities. In a letter addressed to the Commission, the Council men aired the city's grievances. Its contents first expressed thanks to those individuals who had been involved in extinguishing the fire and restoring electrical service in the frigid weather. Then, the letter asked the Commissioners to carry out an investigation, preferably by qualified outside personnel, to determine what caused the recent problems, evaluate the current design of the overall electric system and the maintenance of its equipment, and to judge the Utilities' performance during the crisis. While the authors of the note conceded that this was an unusual request, they believed that this would be the best way to calm the fears and quiet the rumors circulating throughout Hutchinson. The Utilities Commission responded verbally to the letter's suggestions at its regular meeting. General Manager Alexander stated that investigations into the fire and its cause began immediately on January 10 and continued throughout the next few days by local personnel, who were aided by outside firms. Engineers from three different companies were on the scene soon after the fire; they were: Associated Consultants of Minneapolis, an engineering firm that specialized in utility work; Harold Scholz Company of Omaha, Nebraska; and United Power Association of Elk River. Alexander also immediately consulted General Electric, manufacturer of the equipment destroyed, over the telephone. After the three Utilities workers were injured, an inspector from the Occupational Safety and Health Administration (OSHA) came to investigate the incident and the Utilities' equipment. All companies were in agreement after a total of six investigations had been conducted. Declaring that all malfunctions of equipment had been mechanical, Alexander asserted that, "None of it has been because of human error." He went further to cite that GE had made a routine inspection of all equipment in both switchgear buildings just a mere

seven months prior and reported everything was working in a satisfactory condition. Alas, it was inexplicable to GE as to why the breakers did not open nor why an insulator would give way. Citing outages in other localities, General Manager Alexander deduced that HUC's recent outages were minimal compared to these other utilities. Utilities' management compiled a list of outage occurrences in the Utilities' history to further prove their impressive record of service; the list revealed that the last total blackout was in 1957 or 1958 and since then there had only been five outages during the 1970s. Through presenting such facts as these, HUC was able to debunk myths, such as the supposed fledgling state of reliability that the Utilities had to offer, through reasserting the fact that the dependability of the company had only momentarily wavered and would remain steadfast into the future. In summary, the Utilities was cleared of any notion that they were inept at properly conducting electrical services; any mishap had been due to an accidental mechanical error.

The last complaint lodged by the City Council pertained to the quality of equipment that the Utilities possessed; rumors abounded, insinuating that the equipment was inadequate and was being overworked. These sentiments were erroneous. Despite using temporary replacements for the firedamaged switchgear building and the Curtiss-Wright turbine being down, the stag unit and three other diesel units in the downtown plant produced enough power for the community. They even had a fourth diesel on standby. With a plentiful supply of energy being produced, General Manager Alexander did admit that they bought some power from UPA but that was because it was cheaper to buy than to produce energy. He went on the record to state that when all their equipment was working the Utilities had a generating capacity of 60.7 megawatts; this was enough energy to serve the community and its predicted future growth for the next 10 years. At the most recent peak usage hour, the demand had only crept up to 28 megawatts, a far cry from the Utilities' maximum capacity.

A majority of the complaints that citizens had voiced in January became all but non-existent by the middle of spring. By then, the outages had become a distant memory and the Utilities were only looking forward. Most of the switchgear building construction was near completion and management was already arranging to provide better service through working on the loop line. While matters surrounding the fire were finally on the path towards resolution, incidents between HUC and Curtiss-Wright led to the dissolution of their professional relationship.

### The Undoing of Relations with Curtiss-Wright

These formidable times that the Utilities had endured, due to the fire, were exacerbated by the out-of-commission Curtiss-Wright turbine. Coincidentally, within a day of the outbreak of flames at the switchgear building, the C-W unit was down thus adding to the pandemonium. While concurrent, the incidents were unrelated. Pieces of metal within the Rolls Royce Olympus C gas generator were discovered on the floor, near and around unit #9, making it inoperable. It was found that the blades in the lower compressor portion of the turbine were ruined because a broken section from one of the inlet guide vanes (IGVs) had passed through a rotor, rendering the turbine useless. The aforementioned frustrations that the community had directed at the Utilities, such as the complaints about properly working equipment, were in large part about the failed #9 unit.

Without delay, the Commission board instructed General Manager Alexander to talk to Curtiss-Wright about the Utilities' warranty coverage with the expectation that HUC would be fully covered. He also inquired about how quickly the unit could be repaired or restored. At the time of loss, Manager Alexander proceeded to be in almost daily contact with C-W officials, working tirelessly to find a remedy to this predicament. The broken metal pieces that had composed part of the engine were manufactured by Rolls Royce, thus making matters more complicated as HUC had to deal with two different companies. Accordingly, the Hutchinson Utilities issued a purchase order that was sent to Curtiss-Wright which authorized the unit #9 repair. At the time of the unit loss, the Olympus gas generator had only accrued approximately 765 hours of operating time since the moment it had been installed. While more than a year had passed since the initial installation of unit #9, the unit had been out of service for a greater part of 1978 for replacement work on a defective component in the turbine. Therefore, the Commissioners had opted to extend the one-year warranty. Pursuant to the existing contract between Curtiss-Wright and HUC, the Utilities believed the unit was still under warranty and that C-W would work to restore the unit #9 to a satisfactory working condition.

During May, the Utilities Commission heard some disconcerting news: Curtiss-Wright rejected HUC's purchase order and countered with its own purchase order for the down unit, in the amount of \$381,000.cx Typically, this loss would have been covered under the manufacturer's warranty. The main divergence in opinion between the two parties was in regards to whether the stipulations of the extended warranty were violated. With their refusal to honor the warranty agreement, C-W provided a record of "failure" items and tasks that the Utilities had neglected to do. Curtiss-Wright staunchly believed that its warranty responsibilities were absolved following the discovery that Utilities' workers had not performed the required inspection of the inlet guide vanes at 250 and 500 hour intervals. The company went on record to assert that, "If the required inspections of the entry guide vanes had been performed, a catastrophic failure would have been avoided. This failure is therefore not covered by the contractual warranty." A C-W analysis report that took place on February 23, 1979 determined that if the Utilities' staff had made inspections, the results would have revealed a serious problem with a loss of material from the IGVs and that would have resulted in corrective measures being taken. From Curtiss-Wright's view point, these transgressions negated the warranty. cxvii In light of C-W's response, the Utilities were advised by a local lawyer to hire expert legal counsel; HUC turned to Larry Zelle of the firm Robins, Davis, and Lyons of Minneapolis to be their representative. cxviii

The following weeks and months were spent on determining which party, if any, was liable for the series of events that led up to the failure of the unit. Based upon research orchestrated by the law firm in Minneapolis, the Commission board learned that the faulty design of the inlet guide vanes was the culprit that had damaged engine #9. A potentially debilitating condition was known to Rolls Royce and Curtiss-Wright for a considerable period of time; the material that composed the IGVs had a high probability of fatigue cracking in the vanes. Curtiss-Wright made a statement that, "...cracking of the entry guide vanes can occur within the estimated repair of overhaul life of the gas generator" and Rolls Royce remarked that, "vane failures have occurred previously..."

Wright continued to maintain its position by declaring that Hutchinson was solely "culpable" for the damage incurred on unit #9.

While the Utilities admitted that they were guilty of not executing visual inspections at 250 or 500 hour increments, their legal representation argued vehemently about several flawed aspects of Curtiss-Wright's inspection requirements and actions that undermined the visual assessments' significance. Mr. Zelle began with the failure of Curtiss-Wright to properly inform HUC of the stringent inspection requirements. HUC management avowed that although they were provided with a service information bulletin and maintenance procedure instructions, information pertaining to the IGV examinations were merely two page documents incorporated within several thousands of pages of C-W information and technical materials. On top of that, C-W had dispatched a field service representative to train Utilities operating personnel after the installation of unit #9 and had failed to make any special mention of the required visual inspections. These actions by Curtiss-Wright appeared to be contradictory to their stance that the inspections were central to preventing a devastating unit failure. Mandating the 250 or 500 hour inspection was a crucial component that the Utilities' lawyer believed was admittance on behalf of C-W that its equipment was defective and potentially nonoperational. Under the assumption that the unit would have been running for 24 hours a day, seven days a week, would have meant that the unit could have only operated for a maximum of 10 consecutive days if HUC would have inspected it every 250 hours. Simultaneously, with each inspection, Mr. Zelle felt that it was highly probable that damage to the IGVs would be detected during each check. Even if one IGV had to be replaced every 10 days of operation, the replacement cost was approximately \$1,000. He figured that on this schedule, the C-W gas generator would have required maintenance costs in excess of \$15,000 for every 30 days of operation. Simply put, it was a costly endeavor that would require numerous interruptions in the unit's overall function. The last aspect of the inspection requirement was the most troublesome. Curtiss-Wright's inspection procedures were not preventative, they just perpetuated the cycle of customers replacing defective parts. It was also discovered that C-W had been a deceitful seller; the Rolls Royce Olympus "C" generator was actually a retrofitted and modified Olympus "B". cxx The culmination of all these facts led the Commissioners and its legal counsel to believe that Curtiss-Wright had breached the sales contract for not selling and providing the Utilities with a properly functioning turbo-generator unit. Consequently, the failed engine's impact was not confined to the Utilities alone. Due to the series of events, the Utilities faced violating their own agreement with the United Power Association because of the down unit.

### Strains on the ITA

Hutchinson's energy abundance of 1976, which sparked an amended version of the Interchange Agreement between the United Power Association and Hutchinson Utilities because of the Curtiss-Wright unit purchase, languished following the unit's breakdown. The said agreement set forth the terms and conditions for the 15 megawatts of excess peaking capacity that UPA was to purchase from the Utilities. Since the C-W unit was no longer operable following the discovery of metal fragments near unit #9, the Utilities had to abdicate their selling position to UPA. HUC crept close to contravening the agreement, which resulted in UPA voicing their distress about the unavailability of the turbine of which

they were supposed to be purchasing energy from over the course of many months. Since January 11, UPA had continued to honor the agreement through administering payments without receiving any energy in return. In response to the complaints, a new agreement was confirmed between the two parties in September that in the event that unit #9 was not operating up to industry standards after October 31, 1979, there would be a month-to-month suspension of UPA payments. Unfortunately, on November 1, the unit was unable to attain even a par performance status. Opportunely, that lackluster performance would not last long. Within seven months, unit #9 was functioning and the two entities entered into a new agreement where UPA would purchase capacity from the unit for the following six years.

### Negotiation and Litigation

At a pivotal crossroads, the Commissioners and Utilities' management needed to determine which course of action to take. While at first contemplating a rescission of HUC's contract with C-W, the Commissioners instead decided to discuss other options with Curtiss-Wright. The Utilities hoped to maintain a good relationship with the company in order to successfully facilitate the repairs on the damaged unit. Both parties were in agreement that they wanted to avoid litigation, if possible; a period of settlement negotiations ensued. In the early stages of the settlement process, the two parties disagreed over how much of the replacement costs each was to absorb. While C-W had originally quoted the replacement cost to be \$381,000; they stated that the tally for all materials and labor was \$526,769.83. CXXIII After various rounds of questions, accusations, and propositions, C-W's final offer was for HUC to pay \$190,000 with C-W covering the rest of the costs. HUC felt this was unacceptable. Countless other offers were exchanged between the two parties, none of which were deemed fair or reasonable by Utilities' management. Growing tired of this incessant discourse, the Utilities evaluated their other options. Due to the many reasons cited above about C-W's questionable actions and claims, the Commissioners felt that they had a winning case. Refusing to be deprived of their legal rights, HUC soon found themselves past the negotiating stage and instead became embroiled in a lengthy litigation battle with Rolls Royce and Curtiss-Wright.

From the onset, the Curtiss-Wright unit had never performed as was originally promised. Problems abounded. After the unit broke down in 1979, it took over a year to get unit #9 back online. Comparatively, the legal process was more time-consuming and prolonged; eight years passed before the matter was resolved in court. HUC's legal representation was first able to settle with Rolls-Royce in 1983 (manufacturer of the substandard engine) for a sum of \$75,000. Next, the Utilities initially won the case against Curtiss-Wright, but it was appealed. Instead of continuing the years-long process of arguing in court, both entities were eager to find a solution. Triumphant, HUC walked away after accepting \$530,000 from Curtiss-Wright. After lawyers' fees and other costs were paid, the final settlement amount was \$346,504.70, a hefty sum.

Riddled with trials, tribulations, and triumphs, these 10 years proved to be an intriguing period of time for the Utilities. No matter what hardship came their way, the Utilities tackled each problem

head-on and usually emerged victorious. The ebb and flow of the 1970s were followed by a calmer, yet thrilling period. Workers, management, and Commissioners of the Utilities looked ahead to a brand new era to see what the future had in store for them.



This was the new logo design that appeared at the end of these 10 years.

# **Chapter 9: Changes Beyond the Horizon—the 1980s**

The volatility and adversity of the prior decade was followed by a more stable period. Barring a natural disaster that wreaked havoc in Hutchinson, peace transcended over the Utilities. While the Utilities did not have to contend with equipment problems or international oil woes, HUC did experience a multitude of turnovers. New relationships were born as others passed on. Plans were made while others did not come to fruition. Fresh projects were begun and other ventures matured. Spurts of growth were once again common occurrences that challenged management. Out of all these changes, what came to be seen as the most remarkable transformations were what happened within both divisions of HUC. In the past, all electricity had been generated from the Utilities' own facilities. As time passed and as energy agreements were made, more power was being purchased from other suppliers. All the while, a synchronization of government decrees transformed the natural gas industry. These events irrevocably altered the character of HUC's electric and gas divisions, forevermore.

# Wheeling Charges Appear in the ITA

As the Utilities entered a new decade, relations between HUC and UPA returned to normalcy following the Curtiss-Wright unit debacle. When another recurrence of growth spurts hit the town, management turned to UPA for assistance in acquiring power. In honor of HUC's objective that called for an affordable and reliable supply of power, the Utilities joined a large interconnected system in 1965 because they believed it was in their best interest. An interconnection provided reduced costs for energy because it obviated the duplication of facilities and afforded participating parties the ability to schedule more advantageous power transactions. Therefore, in 1981 the Commissioners accepted an offer to purchase 10 megawatts of power from UPA; the power was generated from UPA's Coal Creek station, the largest lignite coal-fired plant in America, which was located in North Dakota. cxxvi This new deal was signed into reality when both entities signed an amended version of the ITA in 1982, lasting for five years. CXXVII There were two new provisions that appeared within the document. The first was that all preceding agreements between the two parties were terminated. More importantly, the latter condition was a costly expenditure that from here on out would be billed to the Utilities. Referred to as "wheeling charges", this said expense was waged by UPA to cover costs incurred when energy was transported from its transmission system to Hutchinson Utilities. Because an interconnection operation was an expensive affair, the cost burdens had to be divided among the involved parties, hence the creation of wheeling costs. The wheeling charge was supposed to equal UPA's costs of owning, operating, and maintaining its own system. Originally, the estimated charge was determined to be 5.00 mills per kilowatt hour (kWh). Even though there were investment opportunities that HUC could have pursued to eliminate the wheeling charges, management originally opted to forgo such options to instead paying the more affordable daily fees. At first, the Commission was content with the conditional addendum, yet as the years passed by, the wheeling charge manifested into a point of vexation for the Utilities.

### Another ITA is Begun

Within a year of signing the ITA with United Power Association, the Utilities was looking to enter into a second interconnection with a different organization, known as Cooperative Power Association (CPA). Similar to UPA, CPA was an electric utility engaged in the business of generating and transmitting electric power throughout Minnesota. Once more, the Utilities was probing available resources, seeking to find projects that could help lower the current uneconomical costs of transmission. One calculated solution was to share the transmission assets of another company, such as CPA. Representatives from the engineering firm, Associated Consultants, explicated the advantages of creating an additional tie to CPA's north-south Big Swan 69 KV line. Prospective savings amounted to approximately \$240,000 of participation power and economy energy; the latter term essentially meant that energy available from one party's transmission system would be used to replace more costly energy in the other party's system. cxxviii While an investment of \$1,000,000 would be obligatory to make this interconnection, a feasibility study revealed that the savings from this deal would result in a three year payback that included interest. cxxix Future financial benefits could be realized soon thereafter. The line was owned by not only CPA, but Northern States Power (NSP) as well; the companies were affiliated since August 25, 1967, when the two parties signed an ITA. CPA's 69 kV transmission line extended south from its Big Swan 115/69 kV substation to connect to the Integrated Transmission System (ITS) facilities owned by NSP on the fringes of Winthrop, Minnesota. cxxx Due to NSP's partial ownership of the line, the Utilities agreed to buy economy power from Northern after they learned of the savings that could be generated. Upon much discourse and discussion, the Commission board unanimously agreed to commence plans to construct a switching station. These stations are a particular type of substation where energy can be routed to different sources; they often contain items such as circuit breakers and other "automated mechanisms that switch or divide their output between different distribution lines when system faults occur or shut down transmission altogether in the event of a serious problem." CXXXII On February 27, 1984 the ITA was signed by both HUC and CPA. Due to the nature of CPA and NSP's own transmission agreement, the Utilities also signed a Connection Agreement with NSP that bore witness to the new arrangement between HUC and CPA.cxxxii

After preparations for the switching station were made and land easements were procured, the Commissioners administered the task to management to begin the bid process. Ads called for the furnishing and delivery of material and equipment for the switchyard, control house, and associated transmission line. Bids from eight contractors/suppliers from four Midwestern states were opened during August of 1983. After receiving recommendations from Utilities' staff, the Commissioners awarded the bids to Emblom Brothers Construction of Sauk Centre for the construction of a 69 kV switchyard for \$260,785, a control house for \$115,490, and the transmission line for \$35,000. All three items were expected to take 122 days to be completed. The interconnection could be found approximately one mile east of Hutchinson, where the Utilities' 69 kV transmission line would connect to CPA's Big Swan-Winthrop line. All the aforesaid equipment was to be at all times under the proprietorship of HUC.

Since HUC had three ties (one with UPA, another through NSP, and the last with CPA,) the Utilities was, according to General Manager Alexander, "sitting on a real good deal." These connections enticed offers from larger companies when the Utilities engaged in energy negotiations, often times affording HUC opportunities in which they could realize substantial savings. In 1985, both gas and electric rates were decreased in large part because of HUC's ownership of three tie lines.

### Conservation and Renewable Energies

A rhetoric of conservation resurfaced during the 1980s at the offices of the Utilities. While it had never strayed far from the minds of management, there was a new awareness of the need to safeguard energy resources; this consciousness was not the result of a directive given by any state/ federal government body or a result of power outages, but rather it was a concern derived from the men and women of HUC. Utilities' workers and Commissioners maintained this pursuit throughout the decade while it combed through different parts of conservation. Beginning in 1980, the Commission board instructed General Manager Alexander to work with the staff in creating an Energy Conservation Program that could be implemented permanently. CXXXXVI While no formal agenda would be fashioned until the next decade, many incidents took place in which the Utilities gave money or made other concerted conservation efforts, such as performing home or commercial energy audits.

To solidify their predilections of being a more energy-conscientious entity, the Utilities joined the Demonstration of Energy Efficient Developments (DEED), a spawn of its mother organization, American Public Power Association. At the time of its inception, DEED was the sole research/grant and development program in the country that was funded by and for public utilities. Its core ambition was to invest in future, affordable technologies that would endorse energy "innovation and efficiency". Fortunately for HUC, a grant was received from DEED. Those funds were used to service commercial audits to businesses around Hutchinson. This spirit of conservation was shared between the Utilities and City employees when initial steps were taken to form a Community Energy Council. CXXXXIX

It was clear to HUC that working in a collaborative manner with other organizations would result in a more fruitful outcome in terms of energy conservation. Knowledge of sustainable energy types had grown exponentially during the 1980s, which in turn made the information accessible to a broader audience. The Utilities tried to discern what forms of renewable energy were viable options for Hutchinson. Three of those choices were seriously considered by HUC: waste heat, cogeneration, and hydroelectricity. During a Commissioners' meeting in 1981, a representative from Associated Consultants made a presentation about a possible joint venture between HUC, UPA, and 3M that would utilize the appositely dubbed, "waste heat". Regarded as a waste by-product, hence the name, it was the heat produced by machines and electrical equipment. It was a simple idea: to mitigate the loss of produced energy by salvaging the wasted energy and converting it into clean power and useful steam. Alas, the economic benefits of the waste heat recovery method required expenses that were far too expensive. HUC could not justify the spending of monies because of the financial repercussions that could potentially affect Hutchinson rate payers.<sup>cxl</sup> After the Utilities had dabbled in waste heat research,

the Commission board and 3M turned their focus to another type energy recovery system known as cogeneration. Cogeneration is analogous to waste heat in that it also seeks to recycle formerly squandered energy. The two concepts differ in that waste heat recovery recycles energy that the manufacturer is already emitting, thus no additional fossil fuels are used, while cogeneration runs on natural gas or another traditional fuel source. Yet, cogeneration can recapture the heat produced by generation equipment and simultaneously transforms the heat into more electricity and a functional use for heat and steam. One of the main pitfalls to cogeneration was that it would have required 3M to purchase the necessary equipment and assemble it on its property as well. While cogeneration was an appealing option for both parties, there would have been a duplication of facilities and the required maintenance would have been burdensome and time-consuming. Coupled with the expensive price tag, the Utilities refused to incur such a considerable and unnecessary expense that would have inevitably been passed onto HUC's customers. Therefore, it was not a feasible option. Even though the doors to these resources had been shut, the Utilities would remain wide-open to other conservation opportunities.

Throughout the decade, the Utilities was approached by three different hydroelectric companies. Hydropower is energy that is harnessed from moving water. While it is not only a more environmentally-friendly way to produce power, it also tends to be cheaper than traditional generating equipment running on fossil fuels. Hydrodynamics, Inc. was the first to make contact with the Utilities in the early 1980s. The company was in the process of erecting a hydroelectric plant at an existing dam in St. Cloud and was hopeful that HUC would accept their offer to buy some of the power. CXIIV It fell through. A few years later, a business based in San Francisco traversed the nation to purchase a 12 megawatt hydroelectric facility in Minnesota. HydroPool, Inc., hoped to sell some of its output by entering into a binding 17 year-long agreement (starting in 1987 and ending in 2004) with HUC. cxlv Because of the prolific relationship that the Utilities already enjoyed with UPA (the newly amended ITA allowed for HUC to secure 10 MW of affordably priced energy), they opted to turn down HydroPool's offer. Then came along an offer the Utilities simply could not refuse. A corporation from Canada, Manitoba Hydro, was in the market to sell 15 megawatts of firm power from their Nelson River dam for a reasonable, almost cut-rate cost. Yet, because of the independent and autonomous status that the Utilities currently held, Manitoba Hydro would not deal directly with HUC. After a few years, HUC attained a new standing with UPA that in turn allowed the Commissioners to communicate with Manitoba personally. Due to great misfortune, the Commission's hopes were dashed when a delay in paperwork caused an abrupt end to HUC's involvement in the project (a more detailed account of this incident can be found below).

While most of these renewable energies were ultimately not chosen by HUC, this series of events were a grand demonstration of how Utilities' management and workers were meticulously evaluating a myriad of conservation options, seeking to find the most befitting opportunities for Hutchinson. Optimistic, the Utilities would continue investigating their options until more suitable ones were discovered in the '90s.

#### A Natural Disaster Strikes

Disaster struck the heart of Hutchinson when a tornado touched down, unexpectedly, on June 13, 1983. Even though a tornado watch had been issued at 4 P.M. on that Monday, there was no indication that the community was in a tornado's path since the storm came from an unusual direction. It began to tear through the town around 7:05 P.M. Hardest-hit was the southeast portion of Hutchinson. Within an hour, the all-clear was sounded. Various city departments, volunteers, and Utilities workers emerged from their safe havens and immediately commenced clean-up efforts. The trail that the twister left was one of wreckage: fallen trees, debris, and wind-swept cars were a common sight. Particularly weather-beaten was the McLeod County Fairgrounds, located adjacent to Fair Avenue, which was the scene of toppled walls and torn-off roofs strewn about the grounds. While thankfully no one was seriously injured, the



twister wreaked havoc on the power lines that in turn triggered traffic problems. cxivi In addition, some main feeders were down while feeder lines to the southwest and southeast of the city were proclaimed by General Manager Alexander to be "torn up pretty bad." Even the power plant was a victim of the storm's wrath; a roof landed on the plant and was subsequently moved. A majority of the electrical damage was located north of the Fairgrounds. Moving swiftly, the 20 Utilities' workers labored around the clock to restore power and take care of downed lines regardless of some obstacles that they had to contend with, such as flat tires. cxlvii Many of the men only had enough time to change clothes and grab a quick bite to eat before they were back at work. Electric crews were able to complete most of the work by the following evening in part because of assistance offers that poured in from various utilities, including Elk River, Glencoe, Marshall, Mankato, and McLeod Cooperative Power Association. General Manager Alexander applauded the camaraderie that existed between utilities when he exclaimed, "In a disaster like this, everyone is willing to drop their own work and come to give you a hand." When all was said and done, the tornado caused approximately \$1.3 million in damage to the community. Estimated costs for the Utilities' work was between \$8,000 to \$9,000, while the cost estimate for materials, such as wire, poles, and transformers were in the tens of thousands. Commendable was the efforts of the Utilities as well as all the other city workers and volunteers who helped in the storm's aftermath. Hutchinson continued to be battered by severe storms throughout the rest of summer that kept electric crews preoccupied as they successfully worked to shorten the duration of several power outages.

#### Protective Measures against the Weather

As summer ends, a cooler climate is ushered in by the changing of seasons. All through the mid-1980s, concerns about peoples' well-being grew across the northern part of the country when utility companies would shut off power to customers who did not have the funds to pay their bills (or simply refused to pay) during wintertime, thus endangering their health. In response, a pervasive mandate was put into effect by the Minnesota Public Utilities Commission (MPUC), hereto called the Cold Weather Rule, which was to be abided by all utilities it regulated. From October 15 to April 15, residential customers are guarded against these wintertime shut-offs with a stipulation stating that residents are obligated to apply for an "inability to pay" status, which designs a payment plan with their utility supplier in mind. Municipal power suppliers and most electric cooperatives were not governed by MPUC; therefore they were not bound to abide by the new policy. Yet, many followed the rule upon a request received by Governor Rudy Perpich. HUC did not have to adopt this rule because it had already established its own weather rule at the time of its inception in 1936. The Utilities would watch when temperatures would fall and temporarily refrain from shutting off power or gas to customers in an attempt to have the affected persons pay their bill before the expiring date of the disconnect notice. Rate payers were encouraged to work out a budget that would guarantee the payment of utility bills. Customer service personnel were assigned the task to help set up payment plans and direct those individuals to obtain energy assistance funds from various government or philanthropic agencies. cxlix Mirroring its wintry policy, the Utilities has a comparable rule that is applied during the summertime: if there is an advisory heat index issued, there are no power disconnects. Continuing to this day, the Cold Weather Rule/heat index advisory shields customers from the chilly throes of winter and the blistering heat of summer.

# The Impact of Deregulation and Open Access

Another regulatory government body issued a ground-breaking rule that had nation-wide ramifications. The Federal Energy Regulatory Commission (FERC) announced that they planned to implement a new measure in 1986, hereto known as Order 436. Government oversight of all sorts of public utilities, particularly natural gas, had dated back to the 1930s and was seen as being a fundamental cornerstone on which the current utility infrastructure was built upon. Interstate transactions of natural gas had come under the supervision of FERC while intrastate transactions became monitored by state public utility commissions (PUCs). As time passed, it became apparent that the heavy regulatory measures that FERC and PUCs instigated were flawed and had produced poor results; the federal jurisdiction had set natural gas price caps to safeguard consumers' wallets. These price ceilings discouraged companies and entrepreneurs to seek and discover new supplies because there were no lucrative incentives available. All the while, transportation markets became monopolized by pipeline companies due to the lack of proper competition. What resulted was a distorted and inflated price charged for natural gas. These costs were then imposed on customers.

Starting in 1978, the government moved towards a path that would lessen the amount of government restrictions applied to private companies; this new direction was known as deregulation. Order 436 came in succession as the most sweeping measure that FERC had yet taken. Many politicians, economists, and utility representatives clamored for natural gas prices to be determined by the free reign of the marketplace instead of through restrictive and arbitrary price ceilings. These same persons championed the concept of government deregulation and intended to create a transformed natural gas marketplace founded in the belief of nondiscriminatory, open-access transportation. Assenting, FERC's

Order 436 required interstate pipelines to transport gas for any supplier. "Open-access" was now assured to all providers while it abolished sole wholesalers of gas (i.e., pipeline companies). Hereafter, pipelines could now be used as "common carriers" by utilities of all shapes and sizes. Local distribution utilities were able to bypass pipeline companies' steep gas prices and purchase natural gas directly from the producers. Following the first steps taken to deregulate the United States' gas industry, production increased, proved reserves decreased, and gas usage proliferated. While the nature of natural gas oversight has changed over time, FERC continues to regulate interstate commerce while intrastate affairs are handled by PUCs. Order 436 unearthed a variety of options for HUC to pursue, all to the benefit of the Utilities' consumers.

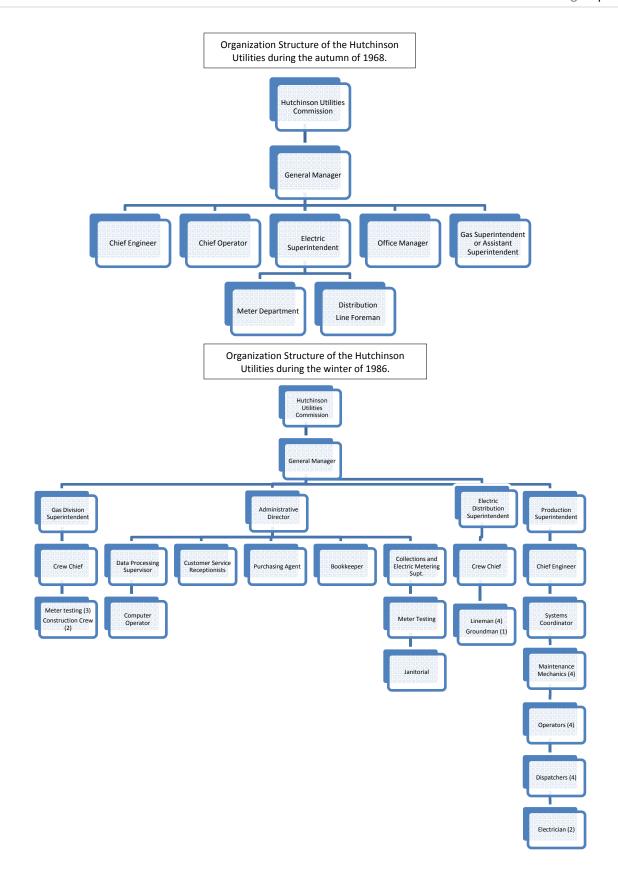
Open-access coupled with deregulation had a profound impact on Hutchinson Utilities' consumers and one of its successful business agreements. As soon as deregulation was enforced, natural gas suppliers fought to remain price-competitive. Northern Natural Gas Company, HUC's supplier, slashed their prices; those savings were passed along to the citizens of Hutchinson. Within one year, Utilities' management staff stated that the average savings realized by each residential gas user was between \$20 and \$25. The expectation of the Commissioners was that natural gas costs would remain low, with the strong possibility that prices would continue to decline throughout the following years. While customers were thrilled that they were able to keep their wallets more full, the Commissioners were contemplating the dissolution of a successful 12 year-old agreement. For more than a decade, HUC had peak-shaved for Circle Pines. However, the policy of open-access invalidated the necessity of the agreement. Principally, natural gas had become more affordable to purchase than generate and Circle Pines was free to choose whatever supplier was to their fancy. In June of 1987, the Commissioners passed Resolution 18 that declared the Utilities' desire to withdraw from the agreement. HUC encountered some opposition from Northern Natural Gas Company, which prolonged the process, but Northern did release Hutchinson from the agreement in September of 1989.

### A Change in Structure

The 1980s was a testament to the growing concerns that businesses had regarding their levels of competence, adeptness, and effectiveness. Intrigued to know the Utilities' level of efficiency, the Commissioners hired a consulting firm, Hay Management Corporation, to accurately gauge the assets, weaknesses, and overall organization of the company. HUC was given a glowing review of its staff's organizational clarity and the ability of its staff and management to foster an atmosphere that encouraged openness among all employees. Hay reiterated the primary accountabilities of the Commission and General Manager: the Commission were representatives of the citizens and were ordained to ensure quality service to the community through the establishment of policies, articulating and setting goals, and appraising results while the General Manager coordinated day-to-day direction and operations. After the preliminary phases of the study were completed, the consultant from Hay most ardently stated that the organization of the Utilities needed to deviate from its past and embrace the possibilities of a fresh methodology to its structure. New interim General Manager Ruth Hakel was appointed the task to design a new organization structure for the Utilities. Hakel reconstructed the 45 employee positions in a more current and fluid Utilities' organizational chart that was immediately

actualized upon approval from the Commission. Through the streamlining of job positions and redesignation of tasks, Hakel eliminated two superintendent/manager positions, and divided the formerly consolidated position of Superintendent of the gas and electric departments into two separate job posts. There are resemblances between the chart from 1986 and the current 2010 structure, even in spite of the Utilities' current employment roster, which totals 57 persons.

On the next page there are two organizational charts that are separated by 18 years. The first dates back to 1968; the latter table is Hakel's creation. An analysis of the charts through comparing and contrasting the diagrams reveals how much the internal structure of the Utilities altered in less than two decades.



# **HUC Considers Becoming Equalized**

From the beginning of the decade and for the following six years, the Utilities was courted by United Power Association to enter as a more preferential member in one of its Integrated Transmission Agreements (ITA). An ITA is a legal agreement that is signed by interested parties and establishes the framework for the planning and use of electric systems; members divvy up the maintenance, operating, and maintenance costs based on the extent to how much each party utilizes the system while the construction or selling of facilities are to proportionally reflect a participant's demand on the system. Planning joint systems commanded a significant time commitment from utilities and required a vast amount of coordination and cooperation between the partakers. The Commissioners pondered the rationales of why Hutchinson Utilities, an autonomous municipal utility, would join a power agency. Ultimately, they had settled on the notion to retain their freedom and instead accepted the status as a non-equalized member in the amended Integrated Transmission Agreement of 1982. Up to this juncture in time, the Utilities was capable of adequately nourishing the city's power needs through local production and the supply of 10 megawatts of energy, courtesy of UPA. For the time being, HUC was pleased with this arrangement.

United Power Association's proposition became more tempting in the minds of Utilities' personnel as time passed by. As the possibilities of being a fully equalized member in the ITA were disclosed, HUC became thrilled by the potential prospects that were open to them, along with the possible realization of massive savings through eliminating wheeling costs. The Utilities became exasperated after years of paying the exorbitant wheeling charges billed to them by UPA. Another attractive feature to becoming equalized was that they would have an amplified voice in determining future policies and planning imminent improvements to the transmission system. In addition, the ITA was able to provide greater reliability of transmission service with the reduction of possible interruptions while improving the overall quality of power. Making the 100 percent equity investment also held these other attractive traits: complete use of UPA's transmission system with the ability to purchase wholesale power from other utilities and having the opportunity to sell excess HUC capacity to others connected to UPA's transmission system.

Further fueling their desire to seek a new arrangement with UPA was the Commission's growing interest in certain environmental projects, particularly the vastly appealing hydroelectric dam in Canada, named Manitoba Hydro; entering as a more prominent member in the ITA would afford the Utilities leverage if they were in the market to buy wholesale power from companies like Manitoba. Utilities' management was informed that in order for HUC to have the ability to work with larger energy suppliers, such as Manitoba Hydro, they would have to become an affiliate of some power organization. Essentially, that meant spending a considerable sum of money to attain a more eminent role within an energy entity. Coincidentally, UPA was already preparing to consummate an agreement with Manitoba Hydro.

# The Allure of Manitoba Hydro

One of the most enticing business undertakings was to purchase electricity from a dam along the Nelson River in Canada, 800 miles north of Winnipeg, through the United Power Association. The proposed generating capacity of the project was determined to be 1,100 megawatts, with 850 megawatts reserved for use in Minnesota. In addition, five other upper Midwest utilities had signed a memorandum of understanding in which they pledged to purchase hydro power from Manitoba Hydro. Beginning in 1996 and ending in 2016, these utilities would be able to buy energy at a fraction of the actual energy cost. HUC was informed by UPA that purchasing power was a bargain compared to erecting power plants or buying energy from other sources. Civili Tony Rude, Vice President of UPA, informed HUC that they had a real shot at being able to negotiate for a better power supply contract if they became equalized in the ITA; 15 megawatts (MW) of cheap and environmental power was available courtesy of Manitoba Hydro. The offer put forth by the Canadian company was too sweet for the Utilities to pass up. Due to misfortune, even though HUC had verbally committed to purchasing the 15 MW and set out to sign all the necessary documents and affidavits, the agreement did not come to completion because the required papers were handed in belatedly, by a single day.



A modern-day picture of the Manitoba Hydroelectric dam.
This photo is courtesy of flickr.com.

### The Utilities Try to Become a Big-Wig in the ITA

The ITA that the Utilities was looking to join was the integrated system of United Power Association and Southern Minnesota Municipal Power Agency (formerly United Minnesota Municipal Power Agency; SMMPA provided bulk power generation and transmission services to a number of

municipal utilities). To attain a 100 percent equalized membership, HUC needed to pay an estimated sum of \$4,100,000 to UPA for a 69 kV capacitor bank, five spans of the "HN" 69 kV line near Hutchinson, 14.3 miles of the Elk River-Bunker Lake 230 kV line, the Dickinson 230/69 kV substation, and a 24 mile section of the Blaine-Rush City 230 kV line. UPA then confirmed that they would repurchase all or part of the facilities sold to HUC if the Utilities thought it imperative to construct new ITA facilities in the future.

While eager to embark on a new, more fruitful relationship with United Power Association, the Utilities needed to confirm that becoming equalized in the ITA was a pragmatic business venture; the Commissioners had a profound concern about the bottom line and possible savings that could be transferred to consumers. If HUC decided to pursue no course of action, a representative from UPA issued this dire admonition: wheeling costs were projected to escalate at about 4 percent per year. He figured that during a span of 10 years, from 1986 through 1995, the wheeling charges would amount to a staggering \$9,905,000. Clix After carefully considering and weighing the advantages against the disadvantages of equalization, the Commission board acted prudently when they moved to partake in the ITA as a newly-minted equalized member through accepting the proposed contract. Clix Hoping to move plans along swiftly, all parties agreed to set HUC's adoption date of the ITA for May 1, 1987, while the purchase of \$4,106,736 worth of facilities needed to take place prior to December 31, 1989.

# ITA Difficulties

Hutchinson Utilities' quest to buy into the ITA was not without its obstacles; at times some were seemingly insurmountable impediments. The main hindrance in their equalization pursuit was due to the confines of a state statute regarding municipal utilities. At a Utilities' meeting, the Commissioners were informed that entering into the ITA required a "broader scope of authority" than what the Board was currently charged with, according to Hutchinson's City Charter. Two of the duties that the Commission needed to carry out were the ability to contract within and outside of the state for the transmission of power and the authority to purchase ITA facilities. According to state law, these undertakings were authorized for utilities unless the law was overridden by a city's charter; Hutchinson's Charter placed geographical and authoritative limitations on HUC. In an attempt to gain the Charter Commission's permission, the Commission only requested the authority needed for negotiation purposes and did not request the further blanket responsibilities offered by the state statute. clxi Hutchinson's City Council did acquiesce, after a short deferment, to HUC's requests by granting a limited extension to the authority of the Commission. Making their reluctance known, the Council members stated that they had been loath to increase the Commission's authority because they were afraid that the Utilities Commission would misinterpret the boundaries of their newly-rewarded powers. The Utilities' attorney assured that such a scenario would never take place and restated that the basis for the enhanced authority of HUC was to increase the Utilities' capacity to negotiate agreements that affirmed an economical supply of energy. With the City Council's approval, the Utilities went on to sign the ITA on November 24, 1986.

While the Utilities was trying to persuade council persons to increase the Commission's powers, HUC's employees were working in tandem to find the necessary monetary funds for the buy-in. It had been decided that to be equalized, HUC needed to purchase part of the Dickinson substation, west of Delano, Minnesota. In the end, management converged on the idea that the best financial route to take was to issue \$4 million worth of bonds because it was the most expeditious way to finance the buy-in. This decision was challenged by the City Council at a joint meeting; the council called to question the Utilities ability to repay the bonds without adversely affecting consumer rates. Commissioner Bud Daggett responded to their doubts by informing the members that the Utilities had cash revenue aplenty to repay the bond, aside from the savings that were to be collected following the eradication of transmission costs. clxii A representative from Associated Consultants asked for the City Council to be judicious when they were looking at the big picture. He rationalized, "The longterm (sic) benefits of the ITA have to be considered rather than just the bond issue."clxiii Fortunately for HUC, the Council members did and conceded the Commissioners' request to move forward with seeking offers for the bonds. On November 24, 1986, the Utilities passed a resolution to sell \$3,902,000 worth of Electric Utility Revenue Bonds. By the middle of December, the approved bid for the bonds was awarded to the lowest bidder, Clayton Brown and Associates Inc., a Chicago company.

The adoption date for the ITA, May 1, 1987, was looming near. What was thought to be the final barriers to the Utilities' equalization pursuit was the garnering of approval from the Rural Electrification Association and Southern Minnesota Municipal Power Association. A waiting game commenced. After six weeks of silence, the Utilities decided to enlist the help of former REA director and Hutchinson native, Ancher Nelsen, to hasten the process. The Utilities had already agreed to purchase a percentage of the transmission system in exchange for the forgiveness of wheeling charges. Yet, REA held some liens against a tract of UPA's property that HUC was looking to purchase; hence, the requisition of land and equipment had to be approved by REA. Even though a copy of the purchase agreement was sent to its offices in Washington, D.C. in the beginning of February, the Utilities had not heard a single morsel of information from the association. In the meantime, the Utilities were still being charged wheeling fees, which were estimated at costing HUC an average of \$1,500 a day. clxiv Following almost 10 weeks of dormancy, the Utilities finally received the REA's approval, in large part because of Mr. Nelsen's involvement. Just as the Commissioners received consent from REA, approval from SMMPA hit a minor snag. Concerned about the agreement terminology, SMMPA was withholding approval until there was a clarification on the percentage of HUC versus SMMPA transmission ownership. clav Upon conferring with UPA, SMMPA agreed to have the Utilities join the ITA as a third member. After clearing all of the legal hurdles, the Utilities believed that no other event could delay the ITA process; it seemed inevitable that Hutchinson would be equalized by the end of May.

From when the ITA was originally signed, up to the time that Hutchinson Utilities' President Bud Daggett was authorized to endorse the final supplemental agreement in early May, almost six months had passed. After all the papers were signed, UPA attempted to transfer possession of transmission equipment (Dickinson substation, 69 and 230 kV lines) to HUC, which was supposed to make the Utilities equalized. There was one thing that was amiss: UPA was not the sole owner of the items and or land

that was sold. Instead, a portion of the transmission apparatus was under the direction of prior agreements made with Northern States Power and Cooperative Power. This transgression did not go unnoticed by NSP and CP. Both companies refused to turn over total ownership of the equipment without first settling the matter with UPA, although HUC was allowed to upkeep the maintenance of the Dickinson facilities. While UPA was preoccupied with finding a solution to this quandary, they sought to find a way to delay the ITA equalization deadline. Resorting to having supplemental documents drawn up, UPA authored amendments that extended the time frame that they had to meet conditions with HUC, which would lead to the successful adoption of the ITA. Subsequent extensions were produced by UPA and signed by HUC, but neither resolution nor equalization was in sight after a year.

# Changes to the Commission

After decades of having three members successfully comprise the Hutchinson Utilities Commission, the Commission's efficacy was called into question by some citizens during the autumn months of 1987. Its small stature was viewed troublesome. Somewhat unexpectedly, the City Charter Commission proposed a provision that called for the enlargement of the commission, from three to five persons; the suggested revision was to be put to a vote on the city's ballot. Council members and a Commissioner believed that this was an appropriate response to the growing complexity of utility organizations across the nation. President Bud Daggett conveyed his support for increasing the board when he reasoned that, "Usually a consensus of opinion between more people is better than a consensus of opinion between two people." This was a departure from the Commission's past of asserting, sometimes vehemently, to retain only three members on the Commission board. News of this motion either left citizens perplexed or rankled, because no feelings of dissatisfaction about the Commission were formerly expressed to the public. clavii In spite of the prevailing bewilderment among many people, the revision passed. On the historical day of November 1, 1987 the City Charter was amended to expand the Commission to five members. Each Commissioner's tenure would last five years and no Commissioner could serve more than two successive terms. The City Charter preserved the Commission's, "full, absolute and exclusive control of and power over the City Light and Power Plant and the Natural Gas Distribution System." Two new members were promptly appointed and approved by the City Council. Almost immediately following the induction of Commissioners, HUC was approached by members of the City Council to consider raising contributions to the City. Freshly modified, the City Charter still specified that the Utilities Commission held the power to set the amount of financial contributions to Hutchinson. Even though this provision existed, the Commissioners unequivocally reminded the Council members that the objective of the Utilities was not to provide revenue for the City, but to instead furnish economical and reliable power to its customers. CIXIX After toiling over the appeal during the following months, the Commissioners complied when they passed a motion to raise the current payment to the city from \$300,000 to \$450,000 in 1989, followed by another increase of \$100,000 for 1990. clxx

### Energy Usage Boom in Hutchinson

For a better part of the century, Hutchinson had continued to experience changeability in the number of its citizens, but never had the community witnessed such a population boom as they did during the mid to late 1980s. Echoing this explosion in populace was a swell in customers' usage of energy. Try as they may, the Utilities could not accurately forecast the city's loads due to the success of local businesses that in turn attracted more people to move to town. HUC had to continually make modifications to its plans for improving the distribution service to better accommodate the load growth of its customers. Between 1982 and 1986, the load of the total city's electrical customers grew at a rate averaging between 1 percent and 3 percent. After a modest, yet stable five years of growth, the summer load of 1987 increased unexpectedly by a remarkable 9.6 percent. A year later, that number jumped up another 5.5 percent. Nevertheless, residential customers did not even constitute the majority of electrical usage; 3M and HTI accounted for 54.9 percent of the total energy demand. Engineers at Associated Consultants (AC) were promptly hired to conduct studies of HUC's distribution system. After all the percentages and usage numbers were compiled, AC found that the total installed capacity of the current Interconnections transformer was 45.4 MVA; they had not expected the city's demand to reach the aforementioned MVA figure until the summer of 1992. If the loads continued to grow as they did during the past two summers, the city would reach a demand exceeding the currently installed interconnection capacity in 1989. clxxi Upon being enlightened by AC about its forecasted future, the Utilities Commission directed their schedule of improvements to be accelerated. One of management's first actions was to purchase an additional transformer for the downtown Plant (Plant 1) that would help increase its overall capacity. Other recommendations that the Utilities eventually actuated included the purchase of another circuit breaker, creation of a trunk line, adding additional feeders, constructing another 13.8 kV loop line, and planning for a third satellite substation.

3M was and still reigns as the Utilities' largest customer. Due to this indisputable fact, Utilities' personnel approached 3M to see if they were interested in placing a substation onto the company's property. With a life expectancy of 30 years, the substation was to provide 3M with 100 percent reliability of electrical service, while also having the capabilities to accommodate any further growth in the community. They were. Bids soon went out for a 15 kV metal-clad switchgear assembly for the 3M substation. Keystone Electrical Manufacturing Company of Des Moines, lowa submitted the most favorable bid for the supply of a 15 kV switchgear, battery, and charger, all for \$206,547. More bid specifications were published on the following items: substation conductor, system control and data acquisition system (SCADA), construction of a 115 kV transmission line, and furnishing and delivery of substation steel structures. Actual construction and excavation work was scheduled to begin during the fall of 1989 with a completion date set for July 1, 1990.

#### Back at Work on the ITA

Ever since the Dickinson substation had been placed under the partial ownership of HUC, bequeathed by the ITA, it had become nothing but an incommodious money pit that was second-rate to another substation long desired by Utilities' management. Under false pretensions, HUC had been misled into purchasing part of the Dickinson facilities to satisfy the requisites of the ITA; it had proved to

be a financial burden due to its extravagant maintenance costs. Originally management was under the impression that yearly maintenance costs would have been in the neighborhood of \$40,000 annually. Instead, HUC had been required to pay an estimated \$150,000 for maintenance. Furthermore, the substation and its present line into Hutchinson did not even have sufficient capacity for HUC's entire load. Part of the purpose of the ITA had been to expand the town's existing transmission system. The system, which had not been updated since the late 1950s, was nearing the point of maximum capacity. At the end of the decade, the total generating capability of HUC's plant was 54,805 megawatts. Dickinson's dismal performance was unable to buttress HUC's transmission structure.

While the Utilities had been pressured into buying this set of ITA facilities, management had always expressed interest in building a facility that would satisfy the requirements for ITA equalization, called the Bell substation. A point of contention between UPA and HUC had been that the Commission board had an expectation that the Bell substation would eventually be built as a part of the ITA. clxxviii After enduring months of partial-ownership of the subpar Dickinson substation, the Utilities demanded outright ownership of the future Bell substation. Ever since the Utilities had entertained the thought of becoming an equalized member, management had wanted ownership of this proposed facility. Bell substation was supposed to alleviate any under-voltages and/or overloads upon the loss of some of the ITA transformers, such as one called Big Swan, while furnishing an expanded capacity to Hutchinson's transmission system. clxxix For some unbeknownst reason to HUC, UPA's stance on the project was one of postponement and delay; UPA continually cited various reasons to refrain from building the substation. Eventually, UPA strongly indicated that plans for the Bell station had been abandoned. As HUC's frustrations mounted, UPA presented a 'Fourth Amendment Agreement to the ITA' to the Commissioners in December of 1988. Instead of signing yet another amendment, the Commissioners were provoked into action when they made their dissatisfaction known in a letter they sent to UPA. It affirmed HUC's intent to rescind the sales agreement and demanded for the rapid return of monies paid by the Utilities.claxx New General Manager Clarence Kadrmas declared that HUC had never received title to the Dickinson property even though the Utilities did possess a purchase agreement. Money and properties were returned to their rightful owners after UPA returned HUC's financial investment and when HUC turned the Dickinson substation back over to UPA. On May 5, 1989 the UPA Board of Directors rescinded all resolutions that had been associated with the ITA.

Even though the equalization process had been riddled with unforeseen predicaments, HUC went on the record to state that they had enjoyed a long relationship with UPA that, "we feel has been beneficial to both parties." Over 24 years had passed since the first ITA was signed with UPA and for more than two decades the Utilities had been receiving economical and reliable power from UPA. Refusing to let the rescission process kill its hope for a new agreement, the Utilities listened intently when they were approached, again, to partake as a third member in an ITA with UPA and SMMPA in the latter part of 1989. This time around, UPA was willing to make Hutchinson's dream of the Bell substation become a reality. Unable to resist the benefits, such as no more wheeling fees, HUC saw the ITA as a concord that would lead to the betterment of Utilities' services and facilities. The two parties were able to agree to a new equalization formula and sale of facilities. So, on October 11, 1989 the

Commission board passed, unanimously, a motion to obtain a bill of sale from UPA for approximately \$4,100,000 and to execute a supplemental agreement to trade property dollar for dollar with UPA when the Bell station was built. HUC's initial investment responsibility was satisfied by its purchase from UPA of the mutually agreed upon facilities: a Hutch capacitor bank, HN 69 kV line structure, Blaine 230/69 kV substation facilities, 14.3 miles of "PE" 230 kV line, 24 miles of "PR" 230 kV line, and land easements upon which the electric transmission lines were located. All three parties signed the closing papers on December 27, 1989, making the ITA a fully legal agreement that tethered the three participants together. Within a year, Hutchinson was the designated construction manager for the building of Bell substation while UPA was to design the plan and equipment specifications; construction began in 1992.

While years in the making, the ITA had turned out be a watershed for the Utilities. Its negotiation powers were greatly expanded while prices for HUC's customers fell. However, HUC was no longer an autonomous entity.

### **HUC's Note-worthy and Economical Rates**

At the close of these 10 years, the Utilities had succeeded in upholding one of its main objectives by supplying the most affordable electricity to its customers. The Minnesota Municipal Utilities Association (MMUA), a non-profit representative of municipally owned and operated electric and gas utilities, had a mission to "collect and disseminate information regarding municipally owned utilities." One of those pertinent pieces of information was in regards to rates charged by utilities. MMUA presented its findings after surveying numerous municipal utilities across the state. It was irrefutable; Hutchinson's rates were the lowest when compared to other utilities in the same zone. Clauxive A combination of favorable circumstances such as, energy conservation, a surplus of electricity, and serving two 24-hour industrial users (3M and HTI) helped propel HUC to claim MMUA's coveted distinction.

The Utilities had navigated through uncharted paths over the past decade that altered its degree of autonomy. Hoping that they could tread another series of courses in the new decade, the men and women of the Utilities charged into the year of 1990 with magnificent plans. While uncertain of what the future held, HUC was assured that they would be accompanied by their constant companion, growth.



# **Chapter 10: A Burst of New Energy**

The final decade of the millennium was upon the Utilities. America was preparing to enter a new, postmodern age permeated with scientific and technological advances. Computers were making their way into people's living rooms while the Internet banished geographical limitations on the ability of people to connect with others who resided many miles, states, countries, or continents away. These breakthroughs helped modernity be celebrated in many aspects of American life. Technological improvements were not confined to computers and gadgets, but rather infiltrated all sectors of business, including the utility industry. An increased supply of more contemporary, streamlined, and efficient equipment caused the Utilities' personnel to re-evaluate their facilities; the latest addition to the power plant had taken place in 1976. It became apparent to HUC that in order to keep up with the swiftly changing times, they needed to make a few sublime purchases to support Hutchinson's ubiquitous challenge, a blooming populace.

More families and companies were moving to town due to the attractive and lucrative opportunities that the city had to offer (the low energy rates offered by HUC were appealing incentives). This population boom inevitably led to the expansion of the town's borders and the need to annex surrounding land. Disagreements arose with one of Hutchinson Utilities' neighbors over which party was to provide energy to the various properties and the proper amount of reimbursement that was to be paid. Lastly, just as modernity was sweeping across the nation, a sort of 'green fever' became prevalent in many states. With the access to an infinite amount of data and intelligence available on the Web, many people's concerns about the environment grew as they became more aware of the impact their actions had on the earth. This knowledge trickled down to the Utilities in the form of a new state mandate. Even though the Utilities' management and Commission board were ambivalent about the decade, they knew it was going to be another exciting and exhilarating time. The one thing that would remain steadfast was HUC's commitment to providing an affordable supply of energy; for a short while, the Utilities attained the lowest power rates in the entire state.

### Mounting Energy Needs

Historically speaking, Hutchinson's citizens paid one of the lowest utility rates in the state among municipal utility customers. A 1989 survey revealed that HUC rate payers paid 30 percent less than public utility customers in southern Minnesota. In order to keep their renowned rates at a low level, the Utilities needed a plan that would ensure that the cheap rates could be maintained into the future. Before any proposal could be implemented, management needed to ascertain the future need for power. Presently, the population growth was not slowing down and neither was the pace for local companies' development plans. Wal-Mart was already in the midst of constructing a store on the south part of Hutchinson while HTI was looking at expanding its facilities through the erection of more buildings. In order to properly serve the needs of their customers, the Utilities needed to meticulously assess their ability to furnish power through evaluating HUC facilities. Some of the equipment in the Utilities' possession was a bit dated; a few pieces in the power plant were 45 years old. While all of the equipment was functioning acceptably, the Utilities needed to acquire more equipment to add to the

plant apparatus in order to properly serve the predicted future demand of the public. HUC briefly considered buying or leasing a power plant with another utility partner; the Commission board swiftly dismissed the notion after learning that no such plants were available. By the middle of 1990, management turned their attention to the possible acquisition of a new generating unit, such as a high-efficiency jet engine. The potential outcome of acquiring such a radical piece of equipment was that the Utilities would be able to sustain the low energy rates to customers through the end of the century and possibly beyond, or at least that was the hope.

After a year and a half passed by and numerous studies were waged, it was determined that a major upgrade, in the form of erecting a large engine unit, was needed to support the perpetual growth of Hutchinson. Prior to this determination, General Manager Kadrmas was commissioned to oversee a power supply study in 1991 for the solicitation of proposals from suppliers for the provision of reserve capacities to HUC. While doing so, he investigated some alternative, hopefully more affordable options.

He was stupefied by the results. "Just out of curiosity, I decided I would factor in a power plant expansion. It came as a surprise that expansion was the most cost effective option," explained Kadrmas. Clxxxvi After hearing his findings, the Commission board abandoned the search for reserve capacities and instead settled on constructing a \$12.2 million facility southeast of the Utilities' main office. In order for this plant expansion to succeed, the Utilities needed to publish a bid announcement for the most superlative engine unit. In the bid advertisement, HUC requested for the provision, deliverance, and placement of a simple cycle gas turbine generating set (GTG) that had an approximate base load rating of 35,000 to 45,000



kilowatts and was capable of burning both natural gas and No. 2 fuel oil. clxxxvii

The LM 6000 engine

Weeks of assiduous scrutiny passed by before the Commission awarded the bid for the new generating engine, christened unit #1, to General Electric (GE). For \$12,151,200, GE offered to furnish its LM 6000 engine, which was touted as one of the most efficient units on the market. With 80,000 horsepower, the LM 6000 could satisfy the needs of the entire city on the hottest day of the year with no difficulty. This contemporary unit was to be the focal point of the second plant site for HUC. Once the new plant was operating, HUC felt it would be in a terrific selling position because there were only a limited number of plants being built in the region in the foreseeable future; Utilities management conjectured that its second plant could fill the regional void. Needing to find a means to finance the project, the Utilities hoped to secure some revenue bonds. After surveying the spectrum of offers, the Commission Board awarded a bid from Piper Jaffray Inc. for \$14,075,000 public utility revenue bonds. Scheduled to go on-line in 1994, it appeared as though the Utilities would have a tough time making the deadline upon hearing that the GE unit was backordered. While waiting for the unit to be shipped from Houston,

Texas, the staff got other preparations in order, such as obtaining permits, as they waited for the tentatively-set groundbreaking date of April 26, 1993 to arrive. HUC was eager to have its new plant providing the community with a steady source of inexpensive power.

The typical process of embarking on a project of this magnitude typically lasted between five and six years; HUC was able to make the pivotal decision to purchase the LM 6000 in a mere one-and-a-half years. Even more remarkable was that this was a tremendous purchase for a town of Hutchinson's size. What made the circumstances more uncommon was that it was the first purchase to take place in Minnesota following an agreement between General Electric and the company Steward and Stevenson Services to package and distribute the LM 6000 generator. Both companies sent a representative to



These are the names of those Commission members, along with management, who helped bring about unit #1.

present a dedication plaque in recognition of HUC's purchase of the GE turbine unit. Applauded for their ability to make decisions in an expeditious and diligent manner, management and the General Manager received praise from the spokespersons. "We see so many municipalities agonize over points that don't really effect (sic) the technological aspects." The GE

spokesperson went on to proclaim that, "It's one more milestone between GE and Hutchinson Utilities." This was not the first business transaction between HUC and GE;

over 20 years ago HUC had purchased a unit from GE that was placed on-line in 1971. Never stagnant in planning, Utilities personnel moved forward with other projects that kept delivering energy to customers' businesses and homes.

### Vandalism at a Border Station

That stream of perpetually flowing gas was obstructed when a valve was turned off at a border station and wreaked chaos in Hutchinson one cool Sunday morning in October of 1992. Not a circumstance of happenstance, this was instead an act of vandalism committed by a culprit (or culprits) that spared no HUC customer. The crime scene was at a station roughly six miles north of the community, near Gopher Campfire. A person (or persons) turned a valve that shut off gas service to the entire town. Northern Natural Gas Company, owner of the tampered valve, immediately requested two government entities to become active participants in the investigation. Complicating the crisis was that the already cool weather was experiencing a modest drop in temperatures. This state of affairs necessitated for nearly all of the town's companies and industries to close down their businesses, at least for a few hours. Residents were asked to either shut off their furnaces or turn them down low prior to crews turning the gas on and relighting the pilot lights. Moving hastily, the Utilities' gas crews began the daunting process of turning off every customer's gas meter to allow the lines to bleed. The

aggregate amount of meters was around 3,800. Fortunately, the Utilities personnel did not have to go it alone. HUC dispatched a call for help and received a deluge of offers to come to their aid; even with the assistance of numerous other utilities, crews worked tirelessly to restore service to every home and business for three days. Workers arrived from Austin, Circle Pines, Minnegasco, New Ulm, Owatonna, and Northern Natural Gas Company to help check for leaks in every customer's home. Furthermore, local volunteers from the Fire Department, Rick Plumbing and Heating, TEK, and Allied Mechanical spent many hours and relighting residents' furnaces and water heaters following the incident. HUC was deeply appreciative for these individuals' generous hours of help. General Manager Clarence Kadrmas expressed his gratitude to those who helped in HUC's time of need when he stated, "The outpouring of help was more than we expected. All I can say is I really appreciate the help." If it had not been for the aid of so many people, the situation easily could have advanced into a calamity.



A picture of the formerly vandalized border station, taken in 2010.

The implications of this incident reached much farther than the city's borders. After receiving a request from Northern, the FBI and Bureau of Criminal Apprehension began investigating the felonious event. HUC offered a \$10,000 reward for any pertinent information that would lead to the arrest and/or conviction of the perpetrator(s). Meanwhile, Utilities' management calculated the costs sustained during the gas shut-off; actual losses from the event, including revenue and labor, amounted to more than \$50,000. If the costs of all the volunteer efforts had been tabulated, the amount soared to \$125,000 (no monies were actually paid to any of the neighboring utility crews or local volunteers). It would remain unknown about the total loss of revenue incurred by the city's industries and businesses. To prevent any further tampering of border stations, crews installed security systems on the valves. Meanwhile, Northern took precautionary measures to ensure the safety of its valves across the state and throughout the nation. CXCII Almost a year following that eventful Sunday morning, the lingering effects of the vandalism concluded. After eluding law enforcement agencies for months, felony charges

were waged against three individuals for tampering with the natural gas pressure valves; the men paid dearly for their crimes with spending time in jail and being held financially responsible for the incident. A former gas superintendent, Ivan Larson, reflected on this event as one of the most trying episodes of his professional career. Cacin

# **Hutchinson's Expanding Boundaries**

With businesses booming and families flocking to Hutchinson, the borders were continually expanding and encroaching on the McLeod Cooperative Power Association's (MCPA was a Rural Electrification Administration member) service territory. Disputes over regional perimeters were a common fixture in not only HUC's history, but for all utility companies. The quarrels manifested into a state-wide problem between many municipal power agencies and rural cooperatives that commanded the state representatives' attention. During 1974, the Minnesota Legislature addressed the concerns of all electric agencies and cooperatives when a statute was passed that required electric utilities to prepare a set of official service area maps that illustrated established boundaries. The purpose of this statute was to eliminate the duplication of electric facilities, encourage the coordination of state-wide electric service, and most importantly, to determine which electric utility would provide electricity on an exclusive basis. cxcv Realizing that the rate of growth would not remain static for any town, the state legislature established a procedure that allowed municipal utilities to acquire portions of other utilities service areas that were within a city's limits. In response to the statute, an agreement was orchestrated by HUC and MCPA in 1974 that outlined the boundaries of each party's service region. A compensation formula was devised that stated the Utilities would pay the equivalent of 10 years worth of their profit on the newly-annexed site, which was roughly two-and-a-half times the total sales on the site for one year. Another stipulation in the agreement was that MCPA was to be compensated for any of its equipment that had been serving the area. CXCVI This document remained as the premise on which the two parties operated, harmoniously, regarding service areas for the next 17 years. Some snags materialized after Wal-Mart came to town and Hutchinson Technology Inc.'s development plans unfurled.

Out of all the expansion that Hutchinson was undergoing, one particular side of town bore witness to a burgeoning and limitless growth. Creeping further and further south, the boundary of the town was extended as more neighborhoods sprung up and two new schools were constructed. Adding to the expansion was the mammoth corporation, Wal-Mart. Its representatives planned to annex a plot of open property located just south of the present boundary lines of Hutchinson in which it could erect a retail store. Whenever the City took possession of a tract of land, the electrical service switched over to the Utilities. HUC and MCPA were able to come to a concord, regarding the Wal-Mart property, which followed the procedure articulated in the 1974 agreement; the Utilities purchased the service territory and compensated MCPA with one-half of the property's net proceeds for 10 years. Between the original agreement and when the Wal-Mart store was built in 1992, there was never any compensation payment made by the Utilities Commission to the McLeod Cooperative for "bare ground"; the term implied land that had no prior signs of human development. CXCVIII Just a couple of years later the clarity of the agreement became clouded following HTI's decision to construct two different facilities on bare ground.

These actions served as a catalyst for HUC and MCPA to find a satisfactory resolution regarding this complicated issue.

Although there was an upswing of businesses and people residing on the south side of town, one of HUC's largest customers and one of Hutchinson's leading employers remained stationed along the northeast border of town. As a result of its prosperity, Hutchinson Technology Inc. started to annex adjacent property to accommodate its expansion plans. While doing so, the company inched closer to straddling the service territory boundaries of HUC and MCPA; up until this juncture, all of HTI's headquarters had lain within Hutchinson Utilities' service area through 1991. During that year, HTI adventured beyond HUC's territory and built a tooling center in the McLeod Cooperative's service region. Opting to extend its own distribution facilities to the building, HTI continued to have power supplied by HUC through a designated delivery point. MCPA did not object to this arrangement. Bringing a condemnation action against McLeod Cooperative, HUC sought to not only acquire the HTI piece of land, but to add other properties to its territory that were formally part of MCPA (such as the Clocktower Plaza and the Hutchinson Area Transportation Services building). Victorious, the two parties were able to execute the Settlement Agreement of 1994, which revised the service territory boundaries in accordance with Hutchinson's condemnation charges; it also provided payments to MCPA for HUC's acquisition of its facilities, service areas, and the release of customers. CXCVIII While both parties were pleased with the outcome, they failed to address two major issues in regards to HTI: the boundary line between MCPA and HUC in respect to HTI's property, and the compensation that MCPA should receive for the loss of territory, or bare ground. cxcix Instead of fading away, the problem flared up in a matter of months.

All through September of 1994, HTI labored to build a training center on a five acre parcel of vacant land that was acquired in 1987, 12 years after service boundaries had been set. Once again, the structure was within McLeod Cooperative's assigned service area even though the building was within city limits.<sup>cc</sup> Reiteratively, HTI chose to have HUC supply power to its distribution center. This time around, MCPA voiced its protestations. While Utilities' management conceded that it was indeed serving HTI, they construed that HUC's acts were authorized under prior agreements between the two parties. McLeod Cooperative disputed the right of HUC to serve HTI without rightly paying for it. Divergences in opinion regarding the interpretation of past agreements and statutes resulted in MCPA turning to a third party to help settle the matter, once and for all. Filing a complaint to the Minnesota Public Utilities Commission (MPUC), MCPA attempted to assert its statutory right to serve "each and every present and future customer in its assigned service area." Personnel from MCPA strove to obtain an order that required Hutchinson Utilities to discontinue providing electric services or pay just compensation to McLeod Cooperative in order to gain possession of the service area. MCPA was hesitant to give up any more territorial land rights to HUC, yet HUC felt it had a resolute responsibility to serve its customers and those persons who desired the Utilities' services. cii HUC's stance on the issue was that they were not obligated to compensate McLeod Cooperative for the five acres because the land was "bare ground" when annexed (similar to the Wal-Mart property and HTI's tooling center). It was determined by the Minnesota Public Utilities Commission that if HUC was going to supply power to

HTI, MCPA was due fair compensation payments. Ordered to either cease providing electrical service to the training center or begin a compensation transaction with MCPA, Hutchinson Utilities proceeded to meet with MCPA representatives to strike a deal. cciii

Over the next two years, the two parties met several times to hammer out an agreeable pact. Determined to defuse the situation, the Commissioners offered MCPA \$23,000 for the disputed territory. The McLeod Cooperative board countered the proposal by requesting a higher payment. It appeared that both parties were willing to settle for \$46,000, double the original offer put forth by HUC. MCPA was poised to "release, acquit and forever" discharge from the Utilities any obligation or responsibility to pay the Cooperative for any of the service territory newly acquired by HUC (mainly HTI properties). Both parties were willing to make this the final compromise in regards to the HTI headquarters. cciv As MCPA was preparing to sign the new agreement, HTI announced another expansion. This revelation crippled HUC's proposal. The Cooperative firmly believed that they were entitled to more compensation for the loss of such a lucrative customer. Desiring to prevent the matter from going to a hearing before an administrative law judge, HUC presented a newly-vamped offer of \$100,000. MCPA accepted.<sup>ccv</sup> In addition, the Utilities came up with a mathematical method that would multiply HUC's gross revenue by two-and-a-half times in order to come up with an appropriate compensation amount for times when potential customers requested the Utilities' services. Furthermore, it was decided that the City of Hutchinson would pay \$800 for bare ground, per building, to MCPA. ccvi HUC became one of the first municipals in the state to design a cost formula (loss of revenue) that would later become the standard guideline that other utilities and the Minnesota Municipal Utilities Association followed in regards to service territories. ccvii After six years, the two parties were finally able to close the highly contentious issue when they signed a power and service agreement during the autumn of 1997.

#### A Renewed Interest in Conservation

The early 1990s saw a resurgence in conservation efforts, owing to the growing body of research and consciousness about earth and the detrimental effects of the collective human carbon footprint. Minnesota legislature deemed that it was so important to curtail pollution that they passed a law in 1991, which applied to both public and private utilities. It mandated that 1 percent of the gross revenue of electric sales and .5 percent of gross revenue gas sales had to be used for local energy conservation agendas; otherwise the money had to be turned over to the state. While all utilities had to submit its first plan to the state by 1992, energy programs did not have to be enacted until 1994. Even though the Utilities did not need to establish an energy conservation program, (they could have opted for the easy route of simply writing checks to the state) they were partial to spending the monies locally, where the results of their labors could truly be seen; more importantly, this was an opportunity to give back to the rate payers. Thereupon, Utilities' personnel were resolute in their search of the most superlative forms of conservation methods. After perusing through various ideas and plans, the Utilities amassed a few fantastic programs.

A group by the name of Hutchinson Tree Board approached the Commission board, to request a \$15,000 contribution from HUC that would be matched by the Minnesota ReLeaf Grant. The funds would go towards energy tree plantings on both private and public properties in the following year. Instead, the Commissioners elected to contribute \$10,000. ccviii Even though an array of trees could be planted, the Utilities monies went wholly towards the growing of windbreak or shade trees. In the year of 1993, 694 energy conservation trees were planted. Hoping to plant at least 200 trees the next year, the Tree Board reappeared at a Commissioner's meeting and appealed the Utilities to partake financially in the grant project, again. Here began the tradition of the Utilities donating at least \$10,000 every year (except for 2006) to the Hutchinson Tree



Image courtesy of http://www.dvoc.org/

Board; beginning in 1997, the contribution doubled to \$20,000, and would later multiply to \$30,000. CCX Many citizens have commended HUC for investing Utilities' monies wisely in the town, where all can reap the benefits of beautiful and energy-efficient trees lining the yards of homes and businesses alike.

Contributions to the Tree Board did not claim all the available conservation funds. Starting in 1994, the Utilities added to its conservation repertoire an issuance of energy conservation grants to residential customers. Available to homeowners for weatherization efforts, the grants were devoid of any income or eligibility requirements and were simply supplied on a first come/ first serve basis. Participants had to perform improvements to their residence that would save heating energy, such as: replacing windows, storm doors, insulation, etc. Equipped with roughly \$70,000 during that first year, the Utilities awarded grants in the maximum amount of \$500 to each homeowner for weatherization efforts.<sup>ccx</sup> Uncertain of how the program would pan out, Utilities staff was pleased to issue grants to 74 homeowner participants in the Grant Program's inaugural year, amounting to \$35,000.<sup>ccxi</sup> The program was such a success that the Utilities reinstated the grants, year after year. Progressively, each passing year saw an increase in the amount of requests and likewise, the sum of available funds. Arguably, the Utilities' rebate program was the most popular and successful of all the HUC conservation efforts. Acclaim for the Utilities' decisions was prevalent throughout the town; customers and citizens were enthused that the monies were kept for local use.

As the Utilities were nearing the conclusion of these 10 years, they saw a progression in the amount of funds that were awarded to citizens of Hutchinson. By 1999, HUC's annual Energy Conservation Program was providing over \$53,500 in the form of grants to homeowners, \$20,000 being given to the Hutchinson Tree Board, \$6,000 was absorbed by administration fees, and approximately \$44,500 was delivered to the Hutchinson School District (see Chapter 12 for more information). As more trees sprouted and new heating measures were implemented, grant participants saw their bills go down; customers could see the tangible effects of HUC's energy program. It was the intention of the

Commission board to continue into the next millennium with a deeper fervor and commitment to embed residents with a desire and knowledge to conserve.

#### The LM 6000 Comes to Town

After being in the works for over four years, the Utilities' second plant was finally able to become a reality. Tenaciously, HUC's staff was able to acquire all the necessary plans and equipment to ensure that unit #1 and the plant were up and running by 1994. Despite its delay in arrival (caused by a backorder), the GE unit came rumbling into Hutchinson on a truck that was supported by 102 tires. For the first time, the LM 6000 was started on July 6, 1994 and seven days later it was generating electricity. At the end of the year, the unit had approximately 2,100 hours of operating time. cxii Following a successful generating trial, the Utilities Commission thought it was a good idea to allow Hutchinson citizens to survey, up and close, the truly unique design of the plant site and behold the wonder of unit #1. Gates around the Utilities' second plant were opened to the public on April 21 and 22 of 1995. On display for all of the visitors to see was a heat recovery steam generator, switchgear, power transformer, Marley cooling tower, new Carrier steam absorption chillers, pumps, piping, and buildings that housed equipment. In tandem with the times, Utilities personnel ascertained that a couple of these items were designed to aid the plant in becoming more efficient and energy-conscious through the use of waste heat and chillers. Yet, the true show-stopper was the towering LM 6000 gas turbine; its design was inspired by engines used in various Airbus and Boeing 747 models and was made by General Electric's aircraft division plant in Ohio. ccxiii At full load, the turbine drew approximately 6.6 million cubic feet of natural gas a day and generated enough power to light almost 14,000 homes. The addition of unit #1 swelled the total generating capacity of the Utilities to 108 megawatts, 52 of which came from the cutting-edge engine. Outfitted to be a steady and inexpensive source of power, the plant was large enough to service Hutchinson, and then some; the city's peak load was presently an approximate 53 megawatts. ccxiv By the end of its first commercial season of operation, unit #1 had produced 151,602 megawatts of electricity. CCXV Plant #2 was a sublime source of generation that came to fill an energy void.



Unit #1

## Facing an Energy Shortage with an Excess of Power

The power pool that Hutchinson was a part of was projected to be 173 megawatts short of demand by 2001. This scantiness was expected to grow to 638 megawatts the following year. Because of HUC's strategic planning, the new power plant assured a persistent supply of power for the next 15 to 20 years, even if some of the older generating units had to be taken off-line. At the present time, HUC was unable to consume all of the generated energy because the town's growth did not currently warrant the plant's full usage. So, the Utilities looked to sell some of its excess power, amounting to 25 megawatts. Due to the power pool's pending electricity shortage, UPA and HUC struck a 10-year lease that not only helped decrease the power pool's energy paucity, but allowed for Hutchinson's customers to have a stable, low-cost power source because of UPA's lease payments. CCXVIII

#### **HUC's Commitment to Low Rates**

Hutchinson Utilities clung tightly to one of its fundamental objectives as it procured the LM6000: maintaining an affordable supply of energy to the citizens of the community. Through adhering to that principle, the Commission board did not have to wage any rate increases following the purchase and installation of the new unit. In fact, they even expressed hopes to decrease the rates due to unit #9's excellent energy-efficiency attribute. The Utilities' industrial rate was 3.24 cents per kWh; the state average was 5 cents. Business and residential rates were 4.4 cents, contrasted to the state average of 5.9 cents. Considering these comparisons, it came as no surprise that HUC's rates were the fifth lowest in a pool of 150 utilities. Since the plant had been conceived by General Manager Kadrmas, he and some of the Utilities' staff designed much of the project and oversaw its production, thus saving HUC's customers an estimated \$5 to 7 million. Even though the project totaled \$22.7 million, payments were disbursed among the following: \$12.7 million came from HUC's savings and the other \$10 million came from the revenue bond. CCCVVIII The continuation of low rates for Hutchinson's customers was due to the unceasing work of the management and personnel that resulted in a plant being acclaimed as the most efficient in Minnesota.

#### Financial Contributions to Hutchinson

In a matter of five years, Hutchinson Utilities contributions to the city had raised over \$100,000, from \$559,000 in 1990 to \$675,000 in 1995. This financial transfer was the City's third largest source of revenue after local government aid from the state and the tax levy paid by local residents. The mayor appealed to the Commission board for \$400,000 to be placed in the General Fund while \$275,000 would be designated for Capital Improvements. After making contributions to the City for the past 52 years (HUC started the monetary transfer in 1942 but was forced to abstain from giving any contributions in 1944 due to World War II), both the Commission and City Council members agreed that some sort of formula should be used to determine HUC's contribution amount, instead of being regulated by the whims of the economy or arbitrarily increasing the funds every few years. The governing entities would not find a satisfactory solution until many years later. At the closing of the decade, the transfer of funds had soared to \$969,000.

#### Another Substation is Built

Hutchinson Technology Inc. was no stranger to growth during this decade, and after hearing of the improvement/expansion plans its management had in store for the company, it became apparent to the Utilities that they needed to accommodate HTI's growing, electrical needs. Management found their answer in a structure, the substation. A substation is a subsidiary station where electricity is transmitted and transformed for local distribution. These structures are critical links in the distribution system since they have the ability to switch, change, or regulate electric voltage. After electricity is generated, it is carried by high-voltage transmission power lines to various areas in need of the resource. Substations have the ability to improve the reliability of a municipal's electrical service by increasing its electrical capacity. It also has the ability to re-route power through its distribution feeders. This contraption was seen as a viable asset to HUC personnel because it could accommodate a growing customer base, not only at HTI, but throughout the entire town. Following the

preparations, obtainment of easements, acquisition of equipment, and preparation of the site, construction began in April of 1998. Named for its main beneficiary, the HTI substation was scheduled to be energized three months later, on the Fourth of July. While the HTI substation was not HUC's sole subsidiary station, (HUC's decision to purchase the Curtiss-Wright unit in 1976 required a transformer and 69 kV power line that in turn resulted in the first substation for the utility; 14 years later another substation was added when one



was constructed on 3M's property), it was unique. No overhead power lines ran to it, all the power travelled to the site underground. Management made the decision to bury the wires in light of hearing construction plans for Highway 7; road crews had expressed a yearning to raise the road. Any such work would have greatly interfered with above-ground electric lines, thus causing more work to be done on the Utilities' behalf. Ultimately, sub-level lines were the easiest course of action to pursue. The addition of the HTI substation added another integral component to the Utilities' transmission system. It would only take a few months to pass before a meeting with Great River Energy (UPA and CPA merged into this entity in 1999) would call for a substation called "McLeod County" to better serve the needs of Hutchinson, McLeod County, and west central Minnesota.

#### Fire at Plant 2

An impending event threatened the soundness of the Utilities' equipment while rattling HUC's staff. On a seemingly typical day in August, Utilities' workers followed standard protocol when they started to shut down the older #9 C-W jet engine unit, complete with a Rolls Royce gas turbine. It was during this time that the workers encountered some unforeseen problems. In spite of the system's safety features reacting instantaneously by shutting off the main fuel supply, a line carrying about 600 gallons of lubrication oil inexplicably broke, caught fire, and triggered an explosion. Flames erupted while clouds of smoke billowed at the generating plant along Industrial Boulevard, otherwise known as Plant #2, on August 26, 1998. While fortunately no injuries were reported, approximately 25 percent of HUC's generating capacity (that was worth almost \$9 million) succumbed to the fire. The unit had accounted for 25,000 kilowatts of the Utilities' total generating capacity of 105,000 kilowatts. Believing the old turbine and its housing had suffered irreparable damage, personnel immersed their energies into finding a suitable replacement for the turbine and getting it back on-line within the next 18 to 24 months. Although the explosion hampered the Utilities' overall generation, it did not have debilitating effects for the citizens of Hutchinson. Power generated by the plant had not been employed for local use; rather the capacity had been leased to UPA. CCXXIV While this predicament could have proved troublesome to other municipals, HUC had an agreement that removed any distress. Abiding by the ITA, the Utilities had up to two years to get its plant back on-line while lost power would be made up by other sources. Wasting no time, the Commission board hired Northern Pipeline to prepare the site where a new unit would be erected. HUC's insurance company unearthed a General Electric replacement generating unit in Italy, which was subsequently prepared in Texas prior to shipment to Hutchinson. ccxx Just in time for the New Year, the unit arrived. A few months following the elapse of winter, the unit began generating.

### The Hot Days of Summer

#### Y2K Draws near

As the decade drew to a close, a looming sense of uncertainty was cast over all parts of the world due to the Year 2000 problem, otherwise referred to as "Y2K". People feared and speculated that immediately after the beginning of the new millennium, all computer programs and other pieces of technology would suffer significant failures as the clocks turned to 2000 because most technological creations were designed to represent the current year with two digits instead of four. Without corrective policies and actions in place, many feared that this would cause a global breakdown in all computer systems that would have a ripple-effect through all aspects of modern ways of life. Banking failures, energy disruptions, and traffic signal errors were just a few of the postulated repercussions of Y2K. Determined to prevail in this volatile period, businesses and government agencies sought to become 'Y2K compliant'. This meant that a business became prepared to "accurately process date and time data between and into the 20<sup>th</sup> and 21<sup>st</sup> centuries." The Hutchinson Utilities felt that it was imperative to become Y2K compliant, and through working with their ITA partners, were able to attain the 'compliant' status.

In response to the potentially dire outcome of Y2K, the City Council, Utilities, police and fire departments, and many other city personnel gathered together to precontrive an emergency services plan for Hutchinson. CCXXVIII Assiduous, the city's leaders were determined to tackle the incident with an arsenal of sound and thoroughly-developed strategies to counter any potential catastrophe. Taking all the necessary precautions, the Utilities Commission ensured that there would be enough personnel on duty to secure locations on New Year's Eve in anticipation of Y2K and any potential problems following the transition into the new millennium. CCXXXIX Fortunately, the Utilities' security personnel and management stood idle as everyone and everything passed into the New Year with nary a technological glitch in Hutchinson. Instead, celebrations carried on through the night as people welcomed another new year.

For the Utilities, the 1990s was a time that the staff was bursting with all kinds of new energies. Due to modernity and its technological advances, HUC seemed to be infused with a desire to improve and/or revitalize their facilities. Amassing the LM 6000 turbine engine and HTI substation, while retaining competitively low energy rates, were no small feats for a town like Hutchinson. The Commission board found success in its talks with McLeod Cooperative and the implementation of its conservation program. This vigor that the staff experienced was easily transferred from the end of the millennium into the 21<sup>st</sup> century. Here, a time was born when the skies became clearer overhead and energy coursed through the ground below. Welcome to the 2000s.



An aerial view of Plant Number 2.

# **Chapter 11: Daring to be Different**

At the cusp of the third millennium, the men and women of Hutchinson Utilities sustained the momentum from the previous years. The technology advances born out of the Net Generation, otherwise referred to as "Generation Z", made HUC keen to try their hand at an assortment of innovative and daring ventures, all for the sake of betterment of HUC services and shielding customers from volatile rates. Likewise, programs that had proved to be a success, like the Energy Program, were not only continued, but were continuously tweaked to be more beneficial for Utilities' customers. While HUC did endure some trying times as they tried to move forward on some essential projects that proved to be controversial, they also were the recipient of numerous accolades throughout the years. Overall, HUC sought to balance the innovations in technology with elements of public utilities that were tried and true: maintaining local control and upholding an outstanding standard of community service. Former Arizona Congressman Mo Udall once remarked that America had the ability to flourish if future generations could harmoniously unite two elements, "change, the ability to adjust things to the special needs of our times; and stability, the good sense to carry forward the good values, which are just as good now as they were 200 years ago." "CCXXXX

#### The Final Transmission Piece

Hutchinson Utilities' electric transmission system had been growing steadily over the years due to the constant stream of growth experienced at some of HUC's largest industrial users, primarily 3M and HTI. At the tail end of the 1990s, HUC energized its most recent substation, located at HTI. Despite this addition, a mere 18 months passed before another substation was needed. Much of the electric infrastructure in Minnesota that was west of the Twin Cities had gone under little change since it was created in 1955. Due to age, the system was perilously close to collapsing, if given the right circumstances. To prevent any equipment breakdown it was determined that \$19 million was needed to invest in the transmission system to bring it to proper working conditions; almost a third of those improvements involved Hutchinson. The first course of action was to commence condemnation proceedings for the purchase of land on which to build what would be called the McLeod Substation. ccxxxi About four miles south of Hutchinson, along County Road 25, and adjacent to Northern States Power's (NSP) major electricity line from South Dakota was to be the site for the new, vital substation. HUC purchased 13.57 acres from a Browntown-area farmer for \$6,000 per acre. This site was the appointed location of a major power line facility that would reduce the transmission voltage from Xcel Energy's line from 230,000 volts to 115,000 volts. From there, the Utilities planned to build a transmission line that would connect the new substation to one built at 3M eight years prior. Electricity was then to be transported into 3M and continued onto the Hutchinson substation. From there, the Hutchinson substation was designed to reduce the voltage from 115,000 volts to 69,000 volts so that the power could be used between both plant locations. CCXXXIII The 3M and Utilities' connection also served as a means to address certain deficiencies in the transmission service of the entire area. "This substation allows the tapping of the main line from South Dakota, through Granite Falls to Minneapolis," declared General Manager Kadrmas. It would provide a new link to the electrical grid that served a great portion of western Minnesota. Because of the acquisition of this substation and transmission line, the

possibility of a major blackout in the entire south central Minnesota area was alleviated. General Manager Kadrmas acknowledged how rife the benefits were when he made the comment that, "This is not only for the city of Hutchinson, but covers an area from Willmar to Glencoe and St. Cloud. We are just a player in it. Everybody has a little piece of the puzzle." As a total, the Utilities was prepared to spend more than \$5.7 million on the upgrades yet only had to shell out \$1.7 million after the revelation that part of the agreement called for HUC to sell its stake in the substations and transmission lines that served the Elk River and Blaine Areas to Great River Energy for less than \$5 million. Built in 2001, the McLeod Substation later became energized in the early months of 2002. Here marked the conclusion of another major project that lead to the completion of HUC's transmission system. As the Utilities was wrapping up one plan, HUC was mulling over the possibility of embarking on a ground-breaking endeavor, literally.



McLeod Substation

## A Pipeline Dream

After 43 years of service, the City's contract with Northern Natural Gas Company (Northern) was set to expire on October 31, 2003. Dating back to 1960, when the Natural Gas division of HUC was born, Hutchinson had received natural gas from Northern Natural Gas Company. For more than 20 years, the Utilities followed a protocol that informed Northern how much gas they wanted for each day. If HUC used more gas than what was requested, the Utilities were charged an arbitrary fee. This procedure changed forevermore following the deregulation of natural gas. Northern transitioned into solely being HUC's transportation provider instead of being a gas supplier. Essentially, HUC would purchase gas from a supplier of its own choice and would rent space from Northern to transport the purchased gas to Hutchinson. From there, the natural gas was used in turbines that generated electricity for Hutchinson and also to heat homes. As times changed, what was once considered a great working relationship evolved into a strained set of business transactions.

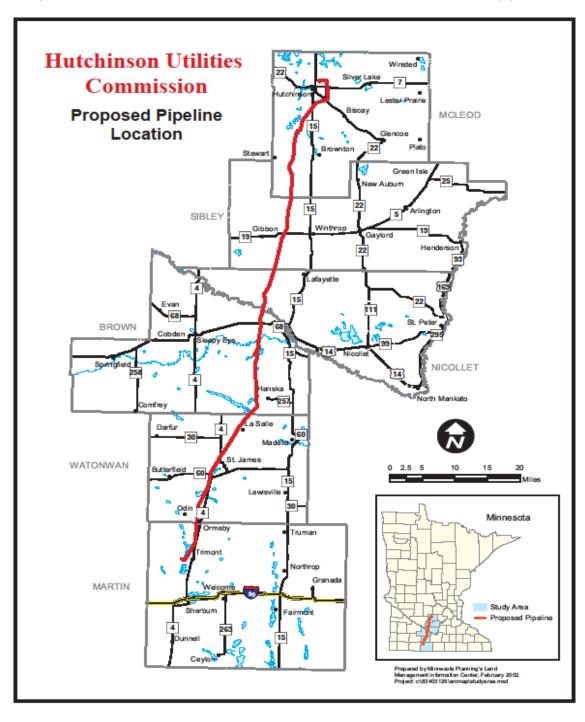
Exasperated, the Utilities had two primal grievances with the business arrangement designed by Northern Natural Gas. Through the years, the costs for gas transportation persisted to be waged by

Northern in an indiscriminate fashion and HUC continued to have no control over those fees. In turn, these costs incurred by HUC had to be passed onto Hutchinson rate payers. Just to renew its contract with Northern, the Utilities was supposed to pay a \$2 million reservation fee. What became even more upsetting was HUC's numerous attempts to work with Northern to upgrade its capacity and pipeline pressure because of the town's perpetual growth; they were all in vain. Unwilling to accommodate the Utilities' needs, Northern refused to provide the level of pipeline pressure that HUC necessitated for allowing its electricity-generating turbines to function more efficiently, especially unit #1. Without adequate space and pressure, the units were unable to operate at peak efficiency, which resulted in the cost of electricity rising. CXXXXV Furthermore, Northern was unable to accommodate HUC's increasing growth because Northern had sold off all extra capacity on its Willmar branch line. Such deficiencies could seriously impede the Utilities' future natural gas needs. ccxxxvi After compiling all of these shortcomings together, General Manager Karmas concluded that, "It's been a struggle for five years." ccxxxvii HUC was compelled to seek other options that would be less costly and provide more reliability, especially in light of the impending ending date of their contract with Northern at the end of 2008. An idea was conceived in 2000, by the Natural Gas Superintendent John Webster and General Manager Karmas, to deliver natural gas directly to Hutchinson independently, via a pipeline. Making their rumination known to the Commission board, the Commissioners responded by giving the proposal their full endorsement. To see if their idea could provide a fruitful outcome for Hutchinson rate payers, the men sought to procure the expertise of a pipeline firm.

After enlisting the help of Maverick Pipeline Consultants and Philip McLean of TransCanada Energy, it was revealed that there were various merits to Hutchinson building and possessing its own pipeline. Namely, the Utilities could build a pipeline for approximately the same amount as it would have cost to extend its contract with Northern. Currently, the price charged by Northern to HUC was between \$2.4 and \$2.7 million annually. In comparison, the estimated costs of HUC constructing its own pipeline were expected to be \$2.5 million or less annually over the life of 20 year bonds that would fund the project. By building its own pipeline, the Utilities would also able to secure enough pipeline capacity to handle the city's expected growth for the next 60 to 80 years while providing the higher pressure needed for the gas-fired turbine electricity generators; the pipeline was to have a capacity of 60,000 MMBTUs of which 40,000 were initially reserved for Hutchinson's uses. CONSENTIAL The excess capacity could then be sold to other municipals along the proposed route. It was projected that at least a third of the pipeline's annual costs could be covered by the municipals. Some potential clientele were New Ulm, Heartland Corn, and Fairfax. The plentiful benefits that could be reaped by the Utilities through possessing its own pipeline convinced the Commissioners to move forward in the preliminary stages of engineering and designing the pipeline.

A route was needed to be determined before the Utilities could begin the process of obtaining the necessary permits to move forward with the plans. Through using the services of Maverick Pipeline Consultants, a course for the pipeline was drawn. Hutchinson's pipeline would tap into a refined natural gas line that was operated by Northern Border Pipeline (a Canadian company); it was a major pipeline that extended from Calgary, Alberta, Canada down to the Windy City, Chicago. Spanning 93 miles, the

pipeline's connection would take place near Trimont, MN and continue through to Hanska before coming to Hutchinson, thus making a trek that traversed six counties. The pipe was to be buried about 54 inches deep while the pipeline itself was to have a diameter of either 16 or 12 inches. As a whole, the overall anticipated cost of the pipeline was \$27 million and would be financed courtesy of tax exempt bonds that totaled \$31,725,000. With the specifications figured out, the Utilities began their quest for permission from various federal and local entities for the construction of the pipeline.



One of the major regulatory obstacles that the Utilities had to clear came at the end of 2001 when they applied with the Minnesota Public Utilities Commission (MPUC) for a certificate of need to build the pipeline. CCXIII Without this compulsory certificate, the project was doomed to failure. It was extremely important for the Utilities to prove that there was a public need that warranted the creation of such an extensive pipeline. While MPUC was consumed with reviewing the Utilities' request, numerous other state departments were advocates of the project; an administrative law judge had even issued a ruling in October of 2002 that the proposed pipeline had satisfied the four main criteria for it to be issued a certificate of need. In addition, the Minnesota Department of Commerce, the Minnesota Historical Society, and the U.S. Fish and Wildlife Services had all reviewed the application and testified during MPUC's hearing process. CCXIIII MPUC finally issued a certificate of need on November 26, 2002 following a three-and-a-half hour hearing where they listened to the indisputable facts that enunciated the necessity of a pipeline.

A single hurdle was left for the Utilities: the granting of a routing permit by the Environmental Quality Board (EQB). Upon evaluation of the proposed route and the submittal of an agricultural impact mitigation plan, EQB ruled on March 20, 2003 that the predetermined route was the best. In the midst of the planning, the Utilities experienced a major turnover in personnel; General Manager Kadrmas, who was fundamental to the pipeline preparations, resigned. Appointed to fill his vacancy short-term was the Utilities' business manager, Patrick Spethman. While the Utilities was garnering approval from the project from local and state agencies, other groups came forward voicing their discontentment with certain aspects of the pipeline.

Whilst the Utilities was awaiting approval from several state entities, management needed to start the bidding process for the provision of pipeline goods and materials. When the bids were received for the pipeline, the lowest bidder was Jomax Construction, a Kansas-based non-union contractor. The Commission decided to accept the construction company's bid. This provoked the members of Local 49 of the International Union of Operating Engineers to picket near the Utilities' main offices on Michigan Street. Given that the Utilities had acted in the best interest of their rate payers through hiring the lowest (i.e., cheapest) contractor, the picketing eventually ceased to exist. Members of the Union went to work on the pipeline, beginning in August of 2003 and continued through to its completion. Even though the problem between the union and HUC dissipated rather quickly, difficulties between the Utilities and other groups/companies proved to be much more problematic.

As it became more apparent that the Utilities was going to have a functioning pipeline by November, Northern Natural Gas Company filed a petition with the Minnesota Public Utilities Commission to reconsider its decision to grant HUC a certificate of need. Though HUC was considered a small customer by Northern, they posed a substantial threat to the company; the potential loss in revenue that HUC paid, \$2 million in transportation fees, was considered a trivial loss to Northern. Northern's objection to the pipeline was traced to the simple fact that supposedly minute municipals normally did not possess gas lines of such vast size. CCXIV It was a monumental event when a modest municipal, like Hutchinson, could bypass such a bigwig company like Northern. If HUC was successful, it could be a watershed for other utilities who desired to gain a more affordable supply of gas. John

Webster, the Director for Natural Gas, recollected that, "If we (HUC) could do it, then others could do it too."ccxlvi To Northern's consternation, MPUC reconfirmed HUC's certificate of need on February 6, 2003. Dissatisfied, Northern went before the Minnesota Court of Appeals to request a review of MPUC's handling of the case. The reasoning behind their petition was that the company estimated the cost of the pipeline to be \$38 million, rather than the \$27 million amount expected by Hutchinson Utilities. It was the fervent hope of Northern to have the certificate of need revoked and have their services retained by HUC. To Northern's dismay, the Court of Appeals handed down a ruling that affirmed the project's certificate of need over six months later. As part of its decision the Court cited the fact that Northern had failed to prove that there was a "more reasonable and prudent alternative" available to HUC. In closing, the Court recognized that the pipeline was financially appealing because of the high probability that HUC would serve natural gas to the communities of New Ulm and Fairfax (this became finalized in September of 2003 when HUC and New Ulm signed a long-tem firm transportation agreement in which HUC committed one third of the pipeline's capacity until the last day of March 2026, unless extended). cxivii Three times Northern tried to challenge the certificate of need, and on three separate occasions they failed to successfully argue that the pipeline was nonessential and exorbitant. While Northern questioned the pipeline's very existence, a group of property owners were more concerned about receiving fair compensation and having the land disturbed as little as possible.

Since the pipeline spanned 93 miles, inevitably, the route of the line had to course through many landowners' property. The Environmental Quality Board's routing permit to HUC specified that Hutchinson Utilities was to "accommodate landowners' requests and to minimize impacts." Utilities' personnel were conscientious when setting the route; they attempted to locate the pipeline on existing rights of way such as county roads while trying to minimize the number of field tiles that had to be crossed. Furthermore, EQB's permit required the Utilities to follow a list of 17 construction procedures that detailed the correct way to mitigate potential damage to a piece of property, especially the topsoil. Seeking compliance, the Utilities worked closely with the Department of Agriculture and enlisted the expertise of soil scientists.

A grass roots organization, dubbed Sib-Ren-Fair, grew amid frustrations and dissatisfaction with the suggested compensation amount that the Utilities offered. Beginning in the spring of 2003, Utilities' personnel had set out to acquire property easements from all affected property owners prior to the commencement of construction season. While HUC would own the easement, property owners could still farm the land; property owners were only restricted from building within the easements. Affidavits were distributed to each affected property owner. In return for a permanent 50-foot easement across one's land, HUC offered a compensation amount based on an "easement value calculation" that determined the value of acreage according to the type of crop planted; after having three appraisals conducted, the Utilities came up with the average value of what land was worth as well as a compensation amount for any potential crop damages/losses. Since HUC is a municipal utility, they had to treat everyone the same; this meant that the Utilities could not offer subjective amounts without justification. Once the affidavits were received, property owners had 90 days to make their decision if they wanted to surrender ownership over the designated easement area. One month before pipeline

construction was to begin, approximately only half of the required easements had been secured out of a total of 241 tracts of land; the Utilities had to turn to a different measure that would ensure that the easements could be secured in a timely manner. Undeterred, the Utilities petitioned to condemn the property (otherwise known as the right of eminent domain). The process of eminent domain allows a municipality to condemn private property for public use without the owner's consent, as long as the owner is compensated. Yet, in their quest for condemnations, a group comprised of 70 property owners, Sib-Ren-Fair, questioned HUC's compensation calculation and contested issues involving their rights as land owners. One farmer lamented, "This gas line will go through my property. It's going to happen...I can't get gas from it, and it takes a number of years to restore the soil structure and recover from the compaction of heavy equipment." Others expressed their apprehension that the order of condemnation would abolish the landowners' rights to their land. Phil McLean, pipeline project manager, tried to allay their fears by stating, "We take no deed, no title to anything. We're not interested in the entire farm...This is just an easement, a right to be there." Basically, land could still be used for agricultural purposes.

As soon as easements were obtained, pipeline was being laid. By the middle of August, the pipeline had reached the boundaries of Hutchinson. At the end of September, an average of nearly 7,000 feet of pipeline was buried a day; the dry summer and its lack of derailing weather events contributed to the construction period progressing unimpeded. It was imperative that the pipeline was functional prior to the expiration of HUC's contract with Northern. Otherwise, the Utilities would have had to acquire capacity from either Northern or another transmission operator that would have resulted

in additional costs for the city's rate payers. Due to future events, HUC was unable to have the pipeline operable before the contract's



termination transpired on October 31. In spite of this, personnel continued working in haste.

Men at work on the pipeline.

Just as construction was about to be finished and after gas had already entered the pipeline, the Minnesota Environmental Quality Board suspended HUC's pipeline's routing permit in the middle of December. In addition to the suspension, there was an order to postpone any further pipeline work. The EQB contended that HUC had not followed the stipulations outlined by the routing permit, especially in regards to an alleged violation of the agricultural land mitigation plan that resulted in the supposed failure to repair drain tiles. Furthermore, the Board adduced that HUC was negligent in

keeping the topsoil separate from subsoil clays while restoring fields crossed by the pipeline. In order to make amends for the violations, EQB required the Utilities to pay \$25,000 for the ongoing investigation, pay farmers for possible future crop losses caused by the alleged soil mixing and compaction, and submit notes and logs made by soil scientists and inspectors. ccli Dumbfounded, the Commission board was surprised by the improper and misguided actions of the Environmental Board. Instead of providing a hearing and presenting evidence that proved the Utilities had behaved improperly, they simply suspended the permit without any factual support; HUC's right to due process was never vindicated. cclii Ultimately, the Utilities believed that EQB's actions were not enforceable, yet they complied with the Board's requests. After receiving some of the requested documents, including county inspector notes, the Environmental Board was informed that no violations had ever been issued concerning the pipeline. Even though HUC received a favorable verdict, the Board agreed to resolve any alleged violations of the permit through paying \$150,000 to the Minnesota Department of Agriculture for any future soil decompaction work that was requested by landowners who had not yet settled claims with HUC. As a result, EQB reinstated the routing permit on February 19, 2004. Just months after the permit was restored and gas was flowing freely through the pipeline, another state entity attempted to exert its authority over HUC.

In the summer of 2004, the Minnesota Public Utilities Commission passed a decision in which they declared that it had jurisdiction over Hutchinson Utilities because of the pipeline; this was the same regulating body that had issued the pipeline's original certificate of need. The rationale behind MPUC's sudden change of heart was in response to Hutchinson's contract with the City of New Ulm, which had a connection to the pipeline. ccliii According to the state's intrastate pipeline law, Minnesota statute 216B.045, required pipeline-owning utilities to file agreements for MPUC review and approval of modification, through maintaining open access to the pipeline for all potential subscribers, and being subject to MPUC's determination of a "just and reasonable rate." After conferring with its legal counsel, the Utilities believed that MPUC had clearly violated Minnesota statues that exempted municipally-owned gas and electric companies from its jurisdiction. Knowing that this action had widespread implications for municipals all throughout the state, the Utilities turned to the Minnesota Municipal Utilities Association (MMUA) and the League of Minnesota Cities to see if they were interested in supporting a HUC petition. They were. MMUA and Hutchinson filed an appeal in which they asserted that municipal utilities already answered to their own utility commission, city council, and most importantly, rate payers. Additional regulation by MPUC would just be a hindrance to the planning of other potential large energy pipeline projects. In response, the state's Commission Board argued that because the pipeline extended beyond the borders of Hutchinson, HUC had to be subjected to its regulation. Once again, the Utilities believed this reasoning was ill-founded because the state Legislature had consistently granted municipal utilities broadened authority, even outside physical city limitations, when conducting certain affairs. cclv It took over 15 months for the Minnesota Court of Appeals to issue a ruling. Pronouncing that state law did not give the Public Utilities Commission jurisdiction over HUC, the Court ruled in Hutchinson's favor. As part of its decision, the Court stated that the Legislature had specifically excluded municipal gas and electric companies from the "regulatory scheme unless the statute expressly provides." Since current law did not explicitly express this type of

regulation, the Court ruled that the state agency had exceeded its authority. Most importantly, the judges stated that MPUC's jurisdiction was rendered useless because city-owned utilities are already effectively regulated by their residents; the same could be applied to New Ulm's city-owned utility. General Manager Mike Kumm (he assumed the position in 2004) expressed relief when he stated, "The Legislature has recognized there is no need for that (state regulation) since residents of a municipality have the power to regulate its commission through local control." CCLVI

Six years after it was proposed and more than two years after it was completed, the last legal entanglement pertaining to the pipeline was resolved. The Utilities' Commissioners voted to ratify an agreement that settled the remaining condemnation cases on 69 parcels of property represented by Sib-Ren-Fair for a total pay-out of \$1.16 million to the group. To further placate the land owners, the Utilities accepted an increased level of responsibility to fix the compacted soil, repair damaged field tiles, and pay for future crop losses until October 1, 2013. CCLVIII With only a handful of property owners left (those who were not represented by Sib-Ren-Fair), the Utilities was able to have all the legal matters settled by the end of 2006.

In hindsight, despite all the hardships that the Utilities endured because of this project, the pipeline has provided a surplus of dividends for the community. From curtailing the future affects of volatile natural gas market price increases to maintaining affordable rates, the pipeline has made it possible for the Utilities to refrain from charging its customers a fuel cost adjustment on numerous occasions. Considering transportation costs alone, possessing the pipeline has resulted in an 8 percent savings for Utilities' rate payers; transportation costs are fixed and are currently half of Northern's. The city built the pipeline with the goal of saving taxpayers nearly \$150 million over 40 years in natural gas transportation costs. cclviii These savings will only continue as the years progress while Northern will continue to increase its rates. cclix Because HUC gained control over costs, the rates will go down after the bonds are paid for in completion. After that, rate payers will only have to pay for the commodity itself, plus the pipeline operation and maintenance costs, which are minimal. In the two years since the pipeline had become operational, the Utilities had already spared its customers from Northern Natural Gas Company's request for two rate increases, amounting to 20 percent. Another enduring benefit is that HUC will have a continual source of revenue through 2023 while it transports gas for New Ulm. Due to its sheer existence, the pipeline has encouraged the creation of other ethanol plants; a plant was developed by New Vision Co-op along State Highway 60.

All of the original antagonists' protestations have been silenced. It is irrefutable that the pipeline has and will continue to be financially advantageous to not only the rate payers of Hutchinson, but to the area of south central Minnesota in an immeasurable way. Most notably, as other utilities' rates were rising in the mid-2000s, HUC attained the lowest gas rates in Minnesota when compared to investor-owned utilities. The derivation of this achievement was Hutchinson's possession of a pipeline.

#### No More Overhead Lines

Power outages are disturbances that are as old as utilities themselves. There are a myriad of happenstances that cause outages, among them being Mother Nature, animals, car accidents, and equipment failure. These factors are aggravated when power lines are strung above ground. Needing to alleviate this seemingly perpetual problem, the Utilities executed a city-wide solution. Beginning in the late 1980s, the Electric department started to replace the overhead wires when a cheap commodity, underground conductors (wire), became available. The great conversion project started to pick up speed in the late 1990s/early 2000s when it became increasingly apparent that the existing overhead lines were in dire need of being upgraded or replaced; much of Hutchinson's electrical grid dated to the plant's inception in 1936. Even though the work was challenging, expensive, and time-consuming, the project would immensely improve the Utilities' reliability as well as increase the capacity of the electric system by allowing a higher voltage to be used. Back in 1936, most residences had 60 amp services; in 2003 most new homes were built with a 200 amp service. CCIX With such a stark disparity in voltage, Utilities' personnel needed to rectify the situation through burying the proper type of wire. As more line was buried, savings climbed because electric crews did not have to go out and restring downed lines. While outages could still occur, the frequency of these incidents would taper. Aesthetically, the conversion would also help to beautify the community by clearing wires from the sky. Amidst all of these wonderful benefits to the project, there were a few downfalls. The large price tag was a cause for concern for some individuals. More importantly, in the event of an outage, there was a possibility that finding the location of the fault could become more difficult and prolonged. These supposed pitfalls were outweighed by the plentiful benefits that were acknowledged as more wire was buried below. In 2008 an analysis was performed using the Minnesota Municipal Utilities Association's ReliaTrak software, which showed that the Hutchinson Utilities was "substantially" more reliable that the most reliable investor-owned utility in the state. The conversion project will attain a 100 percent completion rate by 2013. cclxi

To better track reliability, the American Public Power Association (APPA) took the initiative to develop software for its members that could evaluate how well public power systems were providing service to their end-use customers. In order for this piece of technology to work, a utility had to obtain software that detected key performance measures, known by the acronyms: SAIDI, SAIFI, and CAIDI. Each of these items measured the number of outages a utility had, how many minutes/hours each outage lasted, and the average amount of times that a customer was interrupted during a specific time period; it could even report on the reason(s) for outages. Once the data was captured, the statistics were compared to other utilities' performances. These statistics were able to measure and detect the outages of a power utility's customers. HUC actually assisted APPA through testing the three measures and offering suggestions to augment the program. Once the process was complete, the Utilities Commission purchased the software in 2006. From here on out, HUC possessed a record keeping system that could aid personnel in tracking outages each year and to know what areas would require an upgrade or replacement. Since the SAIDI/SAIFI/CAIDI benchmarks began, the Utilities' system is three times more reliable than Xcel while it can repair and restore power outages 10 times

quicker than its large investor-owned company counterpart. It has remained the goal of the Utilities to either meet or exceed the benchmarks published by APPA.

## A Transfer of Sorts

Following a cut in city funding during the spring of 2003, employees of the City of Hutchinson made an appeal to HUC to help make financial ends meet. The Commission board passed a motion to approve the transfer of responsibility for roadway lighting from the City to the Utilities. Essentially, this meant that HUC would provide the necessary maintenance and upkeep while the City would retain ownership of the street and signal lighting. Hutchinson could have hired a contractor to provide the same services for a much steeper price; hence this action benefited the taxpayers of the City. A rate study was conducted in 2005 that estimated the total annual cost for the street lighting system was \$119,904. Seven years later, that amount had risen to \$146,859.04. At the beginning, the cost of street lighting and electricity were billed to the City, yet those were kicked back to HUC when the state cut Local Government Aid to cities later that year. Soon, a new system for billing was in place. The Utilities still charged the City for the roadway lighting and maintenance costs, but transferred a similar amount of revenue to the City to offset the money owed.

Year after year, the governing entities of the City and the Utilities convened to discuss and negotiate the amount of monies that would be transferred from HUC to the General Funds of the City. For 62 years, these meetings had been an annual (sometimes biannual) tradition in which they determined the correct payment amount after considering the needs of each company. Following these discussions, a cash contribution was made from both the Electric and Gas Divisions of HUC. Tired of agreeing on a sum that erratically changed with the passage of time, both governing entities agreed that a planning tool was needed to help each party financially strategize for the future. It was also important to have fair, stable, and predictable transfers between HUC and the City so that future utility governing board members were provided with consistent numbers that were necessary for well-planned financial operations. The Commissioners' preference was to base those payments off of HUC's gross electric and natural gas operating revenue by 2.75 percent. Both parties agreed to that new payment method entitled, Payment In Lieu of Taxes (PILOT) in the autumn of 2006. Whereas, the contribution of monies will continue indefinitely the formula may be subjected to change. Courtesy of the American Public Power Association, studies of payments and other contributions to local governments invalidated some claims that, "Investor-owned utilities provide a benefit to their communities by paying taxes that the publicly owned utilities do not." Actually, the median contributions by publicly owned utilities in 2002 were 18 percent higher than that of the investor-owned utilities: 5.8 percent versus 4.9 percent of annual electric operating revenues. cclxv To date, the Utilities has endowed \$25,482,528.21 to the City of Hutchinson.

#### **Conservation in Action**

The 1991 law that mandated a certain percentage of revenue sales had to go towards local conservation ventures in order to curb energy usage was still in effect in the new millennium. While the idea remained the same, the execution requirements changed. Beginning in 2002, the state's Department of Commerce dictated that all municipal electric and gas utilities and rural electric cooperative distribution co-ops had to set aside money equal to 1.5 percent of electricity revenues and .5 percent of natural gas revenues for conservation purposes with .2 percent of the monies set aside specifically for low-income customers. A year later, legislation commanded utilities to report on how the monies were used. This information was tracked through a utility's Conservation Improvement Program (CIP); each utility had to develop its own conservation plan that offered a variety of programs to assist residential and business customers become more energy efficient. Every utility was charged with a mission to promote awareness of energy efficient technologies, help rate payers reduce energy costs, diminish emissions, and conserve resources. All plans were subject to the Department of Commerce's approval. Some of the typical programs for residential and commercial customers included energy audits, weatherization suggestions, and rebate offers. cclxvi After coupling these demands with the Utilities' large volume of business, management deemed it sensible to create a full-time position to oversee HUC's CIP. cclxvii

Over the years, the focus of the Conservation Improvement Program alternated; funds were divvied up between residential, commercial, industrial, low income, administrative, and marketing purposes. Whether it was retro light fitting (energy-efficient lighting improvements), providing weatherization assistance, energy load profiles, or coordinating the Energy Star Appliance rebates

program, the emphasis of the program changed in accordance to which type of customer it was aiding. For a duration, the Utilities' CIP directed its attention to city buildings that needed an upgrade; in 2003 \$19,500 of the Energy Conservation Funds went to the Hutchinson Fire Department, while \$18,000 was granted to the Recreation Center, and \$2,000 was handed out to the Police Department. In all, the Civic Arena, HATS Board, Hutchinson Area Hospital, Hutchinson Library, Fire and Police Departments, and the Hutchinson Recreation Center have received



energy funds from the Utilities. However, five years later, the program's emphasis diverged to the HUC's larger customers. Long neglected, the CIP finally turned its focus to the industrial sector of the Utilities' customer base. Energy Conservation Administrator Jon Guthmiller articulated the program's new stance by explaining that, "Industrial customers generate much more electric revenue and we want to turn that back over. We haven't done anything with the industrial sector (in the past)." Each year, the CIP has carefully evaluated how its funds can be utilized to its greatest potential; currently, the total required CIP spending for the 2010 year is \$502,212.00. What was certain is that a program that had begun in the mid-'90s had continually left rate payers clamoring for more.

Started in 1994, Hutchinson Utilities began to issue energy conservation grants to its customers on a first come/ first serve basis. More than 12 years later, the project was tweaked but still followed the same formula. For the rate payer's taking were rebates, in the amount of a maximum \$500, to

homeowners for performing energy conservation and weatherization improvements to their houses that resulted in many rate payers investing in Energy Star appliances. In 2006 the Utilities opted to extend rebates to their commercial users for the first time, except the rebates were offered at a limit of \$2,000. In order to be eligible, the commercial customer had to make improvements to their lighting, natural gas furnaces, gas boilers, air conditioners, gas water heaters, heat pumps, and/or motors. After the public was informed of the energy rebates, the funds were spoken for in a matter of weeks. It became apparent that the Utilities needed to lower the amount of rebate money for each potential recipient so that the funds could be available to more rate payers. Therefore, residential rebates were tailored in order to give both a better ratio of incentive to product cost and to create a higher return of energy savings per dollar spent on the energy measure by each customer. Upon doing so, the Conservation Program has continued to experience success each year through the granting of monies that provide an excellent incentive to each Utilities' customer.

As mentioned above, part of the CIP funding is designated for low income customers. To achieve compliance with this directive, the Utilities sought a partnership with the local Heartland



Community Action Agency to provide services under the Department of Energy's "Weatherization Assistance Program" and "Energy Star Appliances". The abiding ambition has been to lessen the home energy consumption of eligible households by improving each home's energy efficiency while promoting residents' health and safety. Heartland's housing inspector continues to provide home audits at no cost to the resident(s). CCINIX Most funds were and continue to be furnished by the Utilities' CIP and are distributed to Heartland, as well as Habitat for Humanity.

One of the main objectives of the Utilities' conservation program is to cultivate and foster positive relationships with its customers, whether young, old, small, or large. There have been countless examples of Utilities' personnel going out into the community to proclaim the message of conservation. Over the years, Utilities' personnel and the Energy Conservation Administrator have held seminars and conducted energy assessments for larger commercial and industrial customers, supported the "Tom Bovitz Memorial Scholarship" program for high school seniors, and designed presentations that are catered to school groups, such as distributing light sticks and energy efficient florescent bulbs to students prior to Halloween. It continues to be the fervent hope of HUC to convey messages to the public of how vastly important it is to conserve energy and that through pursuing preserving electricity and natural gas, one can realize financial savings.

Dating back to 1993, the Utilities had financially contributed to the "green infrastructure" in Hutchinson as another ingenious attempt to reduce the collective detrimental impact that local citizens had on the environment through minimizing the use of energy. Continuing its partnership with the Hutchinson Tree Board, they diligently continued working to replace boulevard trees and plant shrubbery around public facilities with the Utilities' funds; in addition seedlings were distributed to third

graders every year. Prior to 2007, the donated money was used outside the Conservation Program's funds. Ever since the birth of coordination between the Hutchinson Utilities and the City began 15 planting seasons ago, Hutchinson has planted enough trees, 4,906 to offset the carbon footprint of more than 400 homes. CCLXX

Considering that trees were and are one of the country's most important and treasured natural resources that have the unique ability to cut heating and cooling costs, improve air quality, produce oxygen, provide habitat for wildlife, increase property values, and beautify communities, the Commission opted to become a participant in the American Public Power Association's national TREE POWER project in 2006. This program differed from Hutchinson's local program in that APPA only recognized trees that were strategically placed on properties (east, west, and south) that would in turn reduce a utility's overall peak demand. Utilities' personnel began the task of training workers in quality-care practices and also helping customers plant appropriate trees near utility lines.

Trees
Planted
693
697
293
313
211
282
231
231
202
344
347
365
293
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211

In light of the Utilities' abiding commitment to planting trees, they were bestowed many honors at the end of the decade. First, the Arbor Day Foundation recognized HUC as one of 149 utilities to have 'Tree Line USA Honors'. HUC received the awards by meeting its requirements to participate in a program of quality tree care, providing for annual worker training in tree care practices, and implementing a tree planting and public education program. In its congratulatory letter, Arbor Day asserted that, "Your utility's effort in meeting Tree Line USA requirements…not only helps to provide beautiful trees for the future, but also results in long-term operational savings for your utility." Choici HUC's achievement was derived from its participation in the TREE POWER program. Hutchinson Utilities received the renowned distinction as the sole municipal power company in Minnesota to receive the honor for 2007; the same award was garnered again by the Utilities the following three years. At the same time, the Utilities received APPA's Golden Tree Award for planting at least one tree over the past 14 years for each customer in the city. Finally, in the spring of 2008, HUC and the City of Hutchinson were chosen to receive the Minnesota Shade Tree Advisory Committee's Outstanding Partnership Award for the Energy Tree Planting Project. A community forester for the Minnesota Department of Natural Resources commended the two entities when he stated,

This program is an innovative example of public and private partners getting homeowners involved in reducing their energy needs for the long term. It's a model for other municipal power producers, by showing that trees are an integral part of a community's public works infrastructure. cclxxiii

Even though the Utilities has received acclaim from both near and afar, HUC will not become complacent in its actions. Instead, the Utilities, through its Conservation Improvement Program, will remain committed to conserving energy and saving money through careful analysis of its projects and looking for better ideas to employ for years to come.

## Big Stone II

General Manager Mike Kumm was hired as Hutchinson Utilities was embroiled in legal battles surrounding the pipeline, yet it was not the pipeline that worried him, rather it was Hutchinson's edging closer towards the precipice of lacking a long-term power supply, e.g., baseload power. It was disconcerting that the Utilities was "capacity rich and energy poor." Unlike other municipal utilities, Hutchinson had almost twice as much generating capacity (103 megawatts) as its summer peak demand (approximately 60 megawatts). Even though the Commission Board was informed that they were probably one of the most independent municipals in the state due to the excess generating capacity, those generating units had stood idle for the past few years due to escalating prices for oil, natural gas, and wholesale power. The average cost of generating energy had increased from 1.729 cents per kWh in 1999 to 4.624 cents per kWh just four years later. Consequently, the amount of energy supplied by these generating facilities decreased from 46 percent of total system energy requirements in 1999 to six percent of total system requirements in 2003. CCIXXXX

Historically, Hutchinson Utilities had met its power supply requirements by constructing and operating oil and natural gas-fired generating facilities. With the passage of time, it often became cheaper to buy, rather than produce energy. As a supplement, HUC would enter into intermediate agreements for the purchase of wholesale power from other electric utilities in the region. As commodity prices escalated, the more dependent HUC became on wholesale acquisitions to supply an increasing percentage of its system energy requirements; the Utilities' net wholesale power purchases increased from 54 percent in 1999 to a staggering 94 percent by the early 2000s. Likewise, the last year that it was cheaper to generate than purchase was also in 1999.

Adding to potential future difficulties for not only HUC, but all electric companies, was the increasing constraints on transmission facilities. Even if Hutchinson could buy power in the future, its delivery could not be guaranteed. These limitations, in conjunction with higher generating costs led to increases in the average cost of wholesale power purchases. After hearing this news from the firm, R.W. Beck, it became evident to the Commission board that they needed to secure a baseload energy supply for the long-term. To limit the Utilities' exposure to the volatile spot market in both generating divisions, its management started to evaluate indissoluble strategies that would provide the rate payers some financial relief. A project by the name of Big Stone II seemed to fit the bill.

It was a contrived idea; build a coal-fired plant while the public was becoming more concerned with the ramifications of pollution-emitting industries, such as utilities. Yet, it was the best, most environmentally friendly, and affordable solution to many utilities' troubles, including Hutchinson. In its initial stages, Big Stone II (BSII) was to be a \$1.6 billion coal-fired, 600 megawatt baseload plant, (meaning that its power would be available around the clock). Designed to utilize proven technology for a plant this size, a "supercritical" pulverized coal-fired boiler represented the most efficient baseload generating technology currently commercially available. This advanced technology could reduce emissions for each kilowatt-hour of energy output by approximately 3 to 4 percent over conventional coal technology. The appointed site straddled the Minnesota-South Dakota border; the plant was to be

between Big Stone of South Dakota and Ortonville, Minnesota. Scheduled to be in commercial operation by March 2011, BSII was going to be the second generating unit at the existing Big Stone station. Intended to be equipped with state-of-the-art emissions control equipment at the new plant and performing retrofitting to the existing plant, planners believed that BSII had the ability to reduce total emissions from current levels by 20 percent while doubling the amount of power generated; this was to be a triumphant feat when one considered that two plants would actually be cleaner than one. In addition, BSII participants thought it was essential to build electric transmission facilities in Minnesota at a larger capacity than what was necessary to accommodate for the future development of other generating facilities, including renewable resources such as wind generators. These facilities would not only improve reliability, but in conjunction with other transmission projects, would accommodate the development of 800 to 1,000 megawatts of additional generation beyond what was needed by BSII participants. Originally, HUC was the only municipal invited to be a BSII project owner, yet they relinquished this role because they could not afford the \$100 million price tag of being a property holder. Instead, the Utilities transferred its right, title, and interest in the project to Missouri River Energy Services (MRES) when it signed a purchase power agreement with the agency. cclxxvi Missouri River and six other regional utilities united to build the unprecedented mega-plant, which was designed to serve more than 2.2 million people. Because it took approximately four to six years to plan, site, and build a baseload generating plant, they set about to obtain the necessary permits and affidavits required for BSII's existence.



A preliminary artist's rendering of the plant, via BigStonell.com.

Missouri River Energy Services is a not-for-profit, joint-action agency that supplies electricity and a plethora of energy-related services and programs to public power utilities in Iowa, Minnesota, North Dakota, and South Dakota; the board is governed by the members it serves. Part of MRES' values is a steadfast commitment to balancing the need for a low-cost reliable power supply with proper attention being paid to the environment. Throughout its 40 year existence, 45 percent of MRES members' electricity were traced to renewable energies such as hydroelectric and wind power. Basic membership in MRES was approved by the Commission board in 2005; for a fee of \$16,000 the Utilities was able to employ the numerous perks of belonging to such an agency, such as having rate studies conducted. In accordance with its power agreement with HUC, MRES would provide free management

for the project and would finance the Utilities' share of 42 megawatts of electrical power. As of 2005, HUC's cost per megawatt hour was expected to be about \$38 to \$40 if the plant opened as scheduled, in 2011.

In order to move forward in the planning phases for Big Stone II, the partners needed to obtain three permits: a certificate of need, clean air permit, and a citing permit. Early in 2007, the South Dakota Public Utilities Commission approved, unanimously, BSII's application to construct electricity transmission facilities in South Dakota to connect to the grid in Minnesota. Pending the approval of a Certificate of Need in Minnesota and the Federal Environmental Impact Statement, transmission line construction could begin in the fall of 2008. It was not to be.

BSII was marred by many difficulties. Many environmentalists opposed the project because of the mercury emissions that were released from coal-fired plants. They took their opposition to the press and flooded the papers with articles that denounced BSII. In Big Stone's stead, these persons favored power derived from renewable energies, such as wind power. Their preferences proved baseless when one considered the reliability of wind. Unfortunately, wind was only 30 percent dispatchable in this portion of Minnesota and oftentimes, when energy was most needed was the time when wind all but stilled to a gentle breeze. A conservation group by the name of Sierra Club went so far as to challenge the project's South Dakota permits in court; the courts upheld the South Dakota Public Utilities Commission's decision to grant BSII project participants a permit to construct the plant. What proved to be more injurious was the possible passage of the aggressive Global Warming Mitigation Act, also known as House File No. 375. The State of Minnesota had already passed the Renewable Energy Standard in 2007; part of its contents stated a requirement of utility companies to use renewable generation in order to produce 25 percent of their power by 2025 for the reduction of carbon dioxide emissions. Yet, the Mitigation Act was posed to undermine the Standard by also restricting the output of greenhouse gases, including coal. Additional proposals could hamper and possibly abolish the use of coal-fired plants. General Manager Kumm reacted to the possibility of withholding the use of a cheap source of energy when he reported that, "The potential for electric rates to skyrocket in Minnesota is very real." Baseload generation was critically needed in the region and there was fears that the area would experience a generation shortfall in the future, even after BSII would go on-line. cclxxviii In order to protect Hutchinson rate payers, the Commission Board sent a resolution to the Legislature, urging them to conduct an in-depth study of the "economic, technological and environmental elements" before passing a piece of legislation that could potentially prevent electric companies from meeting the needs of its customers. cclxxix It was vastly important for the Legislators to recognize that all sources of energy were important and were needed to mitigate power costs from 2007 and beyond.

At the beginning of the fall harvest, the Utilities received some devastating news that two of BSII's main investors were withdrawing from the project. Great River Energy (GRE) and Southern Minnesota Municipal Power Agency (SMMPA) were to receive an aggregate of 149 megawatts, or 27 percent of output, from the plant. While SMMPA cited that it was unable to make a long-term commitment due to litigation issues, a GRE representative explained, "Great River Energy still believes

Big Stone II is an important project for this regions, but it is no longer as good a fit for us at it was three years ago." With this revelation, the project was put into jeopardy. Refusing to let the project be placed in peril, MRES requested that its members reaffirm their support for the project because it filled the great need for additional baseload resources while being the most cost effective option available in this area. In addition, BSII was to incorporate highly efficient technology that would result in a cleaner environment as it reduced the level of mercury, sulfur dioxide, and nitrogen oxide emissions. Because Hutchinson did not have any baseload energy; they felt this was the best solution to their present predicament. Following the submittal of numerous resolutions of support, the BSII accomplices forged ahead by revising its plans that reflected the departure of GRE and SMMPA; the plant was downsized to a 500 to 580 megawatt coal-fired station. General Manager Kumm iterated in a letter to Hutchinson's local newspaper that HUC chose BSII because it was the best generation option for the town's rate payers. "We stand by that decision and are confident that, once on-line, BSII will serve us for many years to come." \*\*Cobxxxii\*\*

By early 2009, the BS II project had received seven major permits from both South Dakota and Minnesota; it had finally cleared all its regulatory hurdles. In each case, regulators reached a consensus that the project was the best generation option from the standpoint of reliability and cost. The Plant would have the ability to double the power produced while slightly reducing nitrogen oxide emissions, reduce sulfur dioxide by 85 percent, and cut the current mercury emission by one-half of the 2009 level.

Unfortunately, the success that BSII had achieved was eclipsed by the revelation that its main supporter was backing out in the fall of 2009, thus seriously retarding the progress of the project. The leading utility, Otter Tail Power Company, stated that it was pulling out as a 20 percent participant and as the foremost developer because of the economic downturn and uncertainty about future legislation regarding the regulation of carbon emissions. Tenacious, the four surviving utilities immediately struck up discussions with potentially new participants; one of the last standing was the project's largest remaining partner, MRES. Yet, the utilities did set a deadline for the end of November to determine whether or not to proceed with the project; the companies did not have to wait until the closing date to have their answer. At the beginning of November, it was announced that after almost five years of planning and permitting efforts were executed, the project was terminated. In order to sustain the plant's requirements, the project required additional members to come forward; no one did because of the tough economic times. Even though the project did not come to fruition, HUC was still liable for its share of the plan's legal, engineering, and developmental costs that will be paid in full by 2015.

Without Big Stone II, many were uncertain of how to move forward. Following BSII's death, there was a loss of the project's high voltage transmission facilities that had been sized to serve the region's burgeoning wind energy development. The loss of those lines had the high probability of hindering the future development of wind power in southwest Minnesota. Approximately 2,000 megawatts of wind generation that had been dependent on BSII now had no way to be transported from one destination to another; in other words, 1,000 wind turbines were not erected because of the project's termination. CCIXXXIIII This was a fatal blow to renewable energy.

BSII had been a possible solution to the Utilities' predicament. The project's demise left HUC still in need of a long-term energy supply. So, Utilities' personnel set out to find another answer to our energy conundrum while in the meantime signing short-term agreements for power with various companies.

## The Year of Renewables

For years, Hutchinson Utilities had looked to expand its portfolio of power options as it explored alternatives to generating gas through forms of renewable energy. As an environmentally-aware utility, HUC had repeatedly made attempts to investigate numerous renewable generation opportunities; HUC's own integrated resources plan called for diversity beyond its reliance on natural gas and coal-fired electricity. Beginning in 2006, those potential renewable candidates were scrutinized to see whether or not they were feasible options for Hutchinson. Among the three most carefully considered were: wind energy, biomass, and plasma gasification. Though municipal utilities, like HUC, were not required to meet the state's energy standard of having 25 percent of power being generated from alternative resources beginning in 2025, the Commission board believed pursuing alternative power was the right thing to do. Requesting the aid of MRES, HUC hoped to collaborate with others in developing renewable energy strategies.

Hutchinson is on the eastern edge of a zone where moderate winds sweep across much of western Minnesota. It was believed that there was potential to harness wind for generation purposes. Not only was wind energy seen as a means of providing clean energy, but that it could be a tool for rural economic revitalization, support agriculture, and create jobs. The Utilities teamed up with consultants, Geronimo Wind Energy, to actuate if there was enough wind in the area. While it was deemed that there were satisfactory wind conditions around Hutchinson to hoist some turbines in the air, there were many limiting factors, namely that wind was only 30 percent reliable and was not easily dispatchable due to a lack of transmission lines. Following an economic analysis of building a wind farm outside of Hutchinson, Geronimo informed HUC that they could expect total capital costs to be between \$70 and \$80 per megawatt, with the final price contingent upon financing costs and wind capacity factors. That

was a much steeper price than what the Utilities expected to pay for the 42 megawatts of power from BSII as well as HUC's current cost of \$56 per megawatt. CCIXXXIV Upon hearing this information, the Commission stated that the project was not a feasible endeavor for the Utilities to partake in. As they moved on to evaluating the other alternative energy options, the Commission was advised by management to keep the option of wind in the peripheries of their minds.



Photo courtesy of dynglobal.com

Turning its attention to biomass because it was more dispatchable than wind, the Commission hired R.W. Beck to conduct a feasibility study on the synthetic gas in order to substantiate whether the substance was a viable, renewable resource option for Hutchinson. Biomass is any organic matter available on a renewable or recurring basis that can be used as a fuel source. Utilities' management believed that there was potential that the gas produced in the treatment process at the local wastewater plant or Creekside Compost could possibly replace some use of elastically-priced natural gas because it was a pure waste with vast potential. Representatives reported that biomass was available for conversion into a burnable synthetic gas; enough electricity could be generated for 800 to 2,000 homes. While proven to have promise, the technology was underdeveloped, thus no vendors were willing to warranty their system. Even though the Utilities had to forgo the product's use because it was less developed than desired, Commissioners and management remained open to its future prospects because there was no doubt that this industry was poised to advance into its prime. CCIXXXVI

The final type of energy that the Utilities was considering involved the conversion of renewable fuel, such as corn stover or wood chips, into syngas. An alternative and innovative idea to the usual resources that produced energy, (hydro, nuclear, natural gas, or coal) plasma gasification was postulated as a possible replacement for more expensive natural gas. Since it was in the early stages of development, Syngas could create up to 1.5 megawatts of electrical power, about 3 percent of what Hutchinson required on a normal day. Phoenix Solutions (a Minneapolis-based company that has a local test facility along state Highway 7) approached the Commission Board and proposed a partnership between the company and Utilities to take part in a state-funded plasma energy demonstration. Seeking to have the state subsidize half of the \$5 million experiment, Phoenix requested that the Utilities be willing to contribute \$1 million in return for the future use of the plasma gasification demonstration unit for local power production. Part of its sales pitch was that the project could have helped the state determine if using the plasma process would work in the production of cellulosic ethanol. Unable to capture the beseeched amount of state money during the 2008 legislative session, Phoenix was unable to move forward in its plasma gasification energy test project. HUC ultimately decided that since the technology was not proven, to not pursue anything further.

As with most of these renewable energies, the resources were ahead of their time whenever the Utilities entertained the thought of participating in these applied research projects. Eventually, another pioneering method will be at the forefront of renewable generation that HUC will be able to participate in. Until then, HUC will carry on generating.

A Neat Little Thing: AMI

Prior to entering the next decade, the nation was divided in its presidential election, yet there were a few matters in which both candidates agreed; one of those items was the expressed desire to incorporate smart metering into utilities throughout the country. Smart meters, or automated meter reading were designed to improve efficiency and reliability of utilities' networks; both values were highly regarded by Hutchinson rate payers. In addition, the smart meter technology possessed the ability to supply a utility with information regarding outage notifications, disconnect/reconnect services, and Demand-Side Management and Peak Pricing programs, just to name a few. Each of these items would be available progressively, with time. Automating a process that was formerly done by a third party who manually read 7,000 electric meters and 5,300 natural gas meters each month would eliminate a time-consuming and costly task for the Utilities. Another benefit of the AMI system was that it could eliminate costly rereads that had to occasionally be done. In labor savings alone, the

system could be paid for in about seven years just from not having to manually read 12,300 meters each month. The



An AMI meter that was just installed.

possible benefits and savings to be reaped convinced the Utilities to spend \$1.6 million over a three-year installation conversion when they contracted with Sensus—HD Supply Waterworks for AMI meters. While smart metering has grown out of its infancy as a new technology, it is proven. Nevertheless, the Utilities' management created a phasing plan for the project that considered which areas of the city would be converted first so that kinks could be worked out as the community continued to grow. Making the move to smart metering was stated by General Manager Kumm as being "right in line with where the national energy policy is going."

#### HUC is Among the Best

There has been no indication, nor murmur of the Utilities Commission slowing down as another decade is upon us. Always striving to be better helped earn HUC an awe-inspiring distinction among thousands of its peers. HUC was acknowledged as one of the most dependable and safe municipal power companies in America when it was ranked as one of the top 94 best utilities in the nation by the American Public Power Association in the spring of 2010. Awarded the Reliable Public Power Provider (RP<sub>3</sub>) recognition, Hutchinson Utilities had demonstrated proficiency in reliability, safety, workforce development, and system improvement. Out of a pool of 2,000 not-for-profit, city or state-owned



electric utilities, HUC was placed in the top 5 percent, which was a monumental achievement that the Utilities had rightfully deserved. The cities of Rochester and Marshall were the only other Minnesota municipal companies to get the designation. HUC's remarkable levels of reliability could be attributed to its long commitment to converting the overhead distribution system to become underground; such programs enhanced the Utilities' reliability when compared to large investor-owned companies like Xcel.

## The Long-Awaited Sale Agreement with MRES

Following the downfall of Big Stone II, the Utilities picked up its years-long quest in search of a long-term agreement that could provide Hutchinson with baseload power. Without the assurance of having an agreement in place, the Utilities were facing a rather dismal and uncertain future in which they would hope to continue entering into transient agreements; yet no agreement guaranteed power in the long-haul. Depending on the time of year and if they were unable to secure a short-term power contract, the Utilities would have to fire up their natural gas-fired plants at a more expensive cost than power generated by traditional baseload sources—coal, nuclear, and hydroelectric. The price volatility of natural gas in the mid-2000s sent the Utilities and customers reeling from its turbulent effects.

Sensing the impending need, Utilities' management turned to Missouri River Energy Services to find a satisfactory and affordable solution. After working with MRES for five years, the two entities were able to sign a much celebrated long-term power sale agreement on May 13, 2010 that would remain in effect until January 1, 2046. General Manager Kumm rejoiced in stating, "This is a big deal for us and the Hutchinson community. Our objective for many years has been to acquire baseload energy. We are probably in partnership with the best, or at least among the best, generators in the U.S."

Beginning in September of 2010, 15 megawatts of baseload power was furnished to Hutchinson, at a guarantee of 24 hours a day, seven days a week. That contracted amount consisted of more than 40 percent of Hutchinson's annual energy needs. Starting in January 2013, the level of baseload power is set to increase to 25 megawatts, which will account for 70 percent of Hutchinson's current annual energy needs. The price charged by MRES to HUC for each megawatt-hour will be \$50 for the first couple of years, which equals five cents per kilowatt hour; the Utilities had been paying between \$53 and \$65 per megawatt hour in 2009 alone. In addition to the agreement, there are some benefits rendered to Utilities' customers. Most notable is a renewable component that includes wind power, which satisfies Minnesota's mandate that 25 percent of a utility's power needs to be derived from renewable resources by 2025.

What was for certain in these uncertain times was that if it had not been for HUC's involvement with BSII, they never would have gotten their agreement with MRES.

Through constructing a pipeline, securing a baseload power agreement, and overseeing the two Plants during some unpredictable times, the Utilities were able to carry out the feat of which Congressman Mo Udall spoke of, balancing change and stability.



The Utilities' logo was erected on the side of Plant 1 to add a more contemporary look to the building in the summer of 2009.

## **In Conclusion**

During interviews, it has often been testified that the Utilities have employed a great caliber of people. None of the events that were accounted in this piece would have been achieved if it were not for the terrific employees of HUC. While few were singled out during this writing, know that the cumulative actions of these special men and women were paramount to the overall success that the Utilities have experienced for these past 74 years. In 2008 alone it was found that the Utilities' assets had doubled without increasing the workforce; this is a testament to how exemplary the staff truly is. They have toiled through freezing temperatures and searing hot days to provide the citizens of Hutchinson the luxury of an affordable and reliable supply of electricity. The casserole that is baked to perfection, the television that is airing your favorite show, and the fan that cools you at night are all products of the blessings that electricity has bestowed on us.

The economic vivacity in Hutchinson serves as unequivocal proof that the Commissioners of today and yesteryear honored their mission to provide a dependable, reliable, and cost-effective supply of power. Currently, the value of the electric and natural gas plant serving Hutchinson is in excess of \$100,000,000 while Hutchinson Utilities presently has revenues exceeding \$40,000,000. As guardians of the rate payers, Hutchinson Utilities has been steadily able to lower its costs, thus decreasing the fees charged to customers. Time and time again the Utilities have consistently been found at the cheaper end of the rate spectrum when compared to other utilities; rates are not much more than what they were prior to World War II. Because of its conquests and achievements, such as the establishment of a natural gas division to acquiring the massive LM 6000 unit, the Utilities was and will forevermore remain as an icon in the community of Hutchinson.

As the Hutchinson Utilities Commission looks to the future it will continue to abide by its mission through continuing to sustain reliable and high-quality sources of energy. While it is largely unknown of what the next decades will bring us, rate payers of Hutchinson can be certain that the Utilities will remain at the forefront in any matter regarding electricity and natural gas, perhaps even renewable energies. Citizens can also be comforted by the fact that the Utilities has and will remain under the steadfast control of Hutchinson rate payers.

Former Electric Superintendent, Butch Wentworth, articulated best what each moment was and will be like for the Utilities when he affirmed pithily that, "every day was the same, but every day was different."

#### The Utilities' Mission Statement

The Hutchinson Utilities Commission will provide economical, reliable electric and natural gas service within our service territory and the Midwest, while contributing to the economic vitality of the City of Hutchinson and our customers.

# Chapter 13: Short Recollections of HUC's Community Involvement

Below is a compilation of some brief accounts about the Utilities that spans many decades. These pieces of information recount several examples of HUC's involvement within the community. Each idea was conceived by either an employee or a rate payer that was in turn passed into a motion by the Utilities' Commission; every act was done for the betterment of the town. Ever since the local citizens rallied against Northern States Power Company for its abdication of electric utility ownership, the men and women of HUC made it their unwavering and incessant goal to contribute to the vivacity of Hutchinson. Enjoy the various events that help round out the Utilities unique and colorful history within the vibrant town of Hutchinson. The occasions are listed in chronological order.

March 3, 1951: The Utilities sponsored an electric show in Hutchinson at the local Armory on April 17-18<sup>th</sup>.

April 1, 1954: In conjunction with the Civic and Commerce Association, the Municipal Electric Plant sponsored a two-day cooking school, at the Hutchinson Armory. Two deluxe model electric ranges and dozens of other valuable prizes were awarded to a few lucky attendees.

June 6, 1955: The Commissioners decided to demonstrate their community spirit when they decided to enter a float in the Hutchinson Centennial Parade. The men decided to rent a float from a Minneapolis float company for \$150.

June 5, 1961: Six years after they first decided to enter a float in the parade, the Commission passed a motion to sponsor a float for the Water Carnival.

June 13, 1966: This time around, the Commission chose to sponsor the St. Laurence Cathedral Band from St. Cloud in the Water Carnival.

June 16, 1972: On this day, the Utilities hosted their first-ever open house. The next open house would not happen for another 5 years.

March 20, 1974: The Commissioners decided to distribute free booklets on kite-flying safety to local children. The 16-page booklet was entitled, "Kite Flight" and was to ensure that children would avoid unnecessary accidents.

February 24, 1984: Over 400 enthusiastic responses came from residential customers to have home energy audits serviced by the Utilities. Through the use of a handheld infra-red instrument, Utilities' personnel were able to determine areas where cold air was seeping into a home. After receiving the valuable information, customers were encouraged to make changes in their home, whether it was through adding insulation or altering the quality of ventilation. Because of the success that these home audits rendered, the technology was used at commercial businesses two years later.

July 31, 1984: Stoplights were erected at the intersection of South Grade Road and Highway 15 by Utilities personnel. This was the first time that the Utilities were involved in the installation of traffic lights.

May 21, 1987: Following the footsteps of a Minnesota Municipal Utilities Association (MMUA) program, Electrical Supervisor Butch Wentworth suggested that a Utilities' 'Neighborhood Watch' agenda be implemented in Hutchinson. Utilities personnel were to act as an extra set of eyes and ears for the police department and report anything that was amiss or that constituted suspicious activity. The program followed a growing trend towards community involvement in law enforcement.

June 14, 1988: This marked a year of deliberations in regards to the removal of a much beloved spruce tree that towered directly to the west of the downtown power plant. Some city organizations had desired to erect a civic event sign in the tree's place. A few months later, a storm battered the tree so much that it was removed. The Utilities Commission conceded the City's wish by allowing the city use of the land.

April 30, 1990: A representative from Hutchinson Ambassadors approached the Utilities regarding obtaining new "welcome" signs for Hutchinson to replace old wooden ones. The Commissioners agreed to contribute the material and labor to install the new, lighted "Welcome to Hutchinson" signs. The amount owed by HUC was \$556.50 per sign.

June 3, 1991: The Hutchinson Jaycees requested a contribution from the Utilities for the Water Carnival. The Commissioners honored the appeal by offering \$300. The Utilities would continue its financial contribution to the Jaycees throughout the decade; at a minimum, HUC donated over \$3,200 to the Jaycees.

February 24, 1992: HUC was contacted by the Crime Prevention Program to contribute monies to its advertising campaign for drug awareness. After some discussion, the Commission carried out a motion to contribute \$75 dollars.

August 28, 1995: After hearing a presentation from the Salvation Army, the Utilities opted to place HeatShare inserts with the Utility billing statements. HeatShare was a program that provided assistance to families that needed financial help with paying their energy bills.

April 16, 1996: HUC was the site for the Minnesota Municipal Utilities Association's 6<sup>th</sup> Annual Diesel Generation Workshop. Since the Utilities retained some functioning diesel engines, they were an anomaly in the utility world. Hence, some of the staff went to the Hutchinson campus of Hutchinson-Willmar Regional Technical College (now known as Ridgewater College) to train people from all around the world on how to successfully run a diesel engine; most of these engines had been scrapped out of plants in the 1970s.

February 9, 1999: Utilities management approached the Hutchinson school district to see if they had potential qualifying needs to receive a grant that could be furnished by HUC's energy conservation

program. ISD #423 received \$45,000 from Hutchinson Utilities when they made some primary improvements to the middle school pool, installing better lighting, and purchasing a computerized energy management upgrade system that would provide optimal heating starts. The schools were able to see lower energy costs following the improvements made to the various facilities.

October 5, 1999: The City Council decided to replace stands in the Hutchinson Civic Arena following the tragic death of a young boy. While the City had decided on what type of up-to-code models they wanted to purchase, the Council did not have the \$300,000 worth of funds needed to finance the project, after receiving a Mighty Ducks grant. HUC voted to provide \$321,000 in three equal installments to be paid between October through May of 2000. Support from the Commissioners was aroused by the desire to maintain an optimal standard of safety for the citizens of Hutchinson.

December 29, 1999: The city of Hutchinson looked into purchasing a Computerized Energy Management System for the HATS facility. The Utilities contributed \$25,000 from its energy conservation fund to help obtain the system.

March 20, 2001: After serving local readers for 97 years, the Hutchinson Carnegie Library was in dire condition; the windows desperately needed to be replaced. "The wood is rotting and the glass is loose in some of them," declared Head Librarian Mary Henke. Not only were the windows in poor condition, they were very inefficient when it came to energy conservation. While the window replacement was billed to be between \$35,000 and \$50,000, the Commissioners passed a motion to approve up to a maximum of \$25,000 or one-half of the cost of window replacements. Over two years later, on July 30, 2003 the Commission board unanimously passed a motion to allocate \$22,000 from the Energy Conservation Fund to the Hutchinson Library Project for lighting renovations.

March 31, 2004: Through the use of CIP funds and in conjunction with the Hutchinson Housing & Redevelopment Authority, the Utilities purchased Energy Star air conditioners for the tenants of Park Towers.

September 28, 2005: In conjunction with Cash Wise, the Utilities sent personal hygiene products down to Mobile Gas, Alabama for distribution to the victims of Hurricane Katrina. Because of Cash Wise's generosity, the Utilities were able to purchase a large pallet of supplies for a relatively small cost of \$500.

September 28, 2005: HUC decided to sponsor a program called, "My Favorite Book". Every first grader in every Hutchinson school was to receive one of these books, which emphasized communication and values.

November 30, 2005: Acting on the suggestion of two of its employees, the Commission board decided to have a drawing for turkey. In order to be eligible for the drawing, Hutchinson residents had to bring in a non-perishable food item for the McLeod County Food Shelf. A year later, the Utilities decided to renew the drawing to help eradicate local hunger.

October, 2006: Hutchinson Utilities put on a successful Public Power Week Open House. Bags of goodies were handed out to each visitor while demonstrations were given by both the gas and electric divisions. Herein marked the first annual Open House; the fifth Open House just occurred this October.



February 28, 2007: Demonstrating its community involvement, the Utilities held the 2<sup>nd</sup> annual Safety & Trade show. It was a huge success.

November 25, 2008: Throughout the years, the Utilities has given numerous tours of the power plants to people both young and old. On this day, Utilities' personnel were going to lead Cub Scouts throughout the plants.

August 26, 2009: HUC gave bucket rides for kids and families at the Hunters Church, "Community Cares for Kids Carnival."

July 28, 2010: Energy Conservation Administrator, Jon Guthmiller, conducted a highly noteworthy load profile for the local business of Regional Eye Specialist that has become a state benchmark. As a result of this task, he saved the company 25 to 30 percent in energy costs through lowing power usage.



This sign was a part of the beautification project that took place at the downtown plant.

# Chapter 14: A Collection of Hutchinson Utilities' Statistics & Tables

#### **HUC Data**

Total HUC contributions to the City of Hutchinson to date: \$25,482,528.21

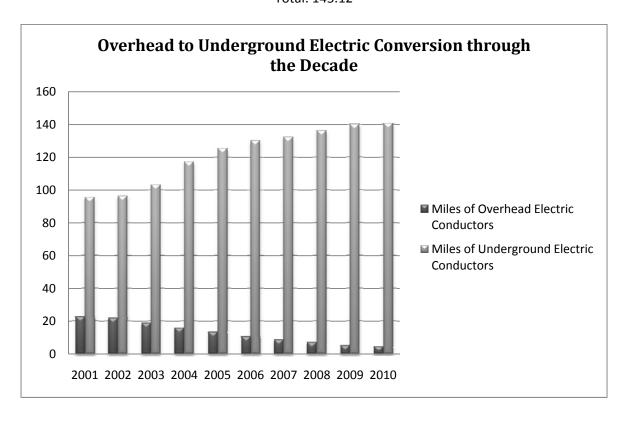
Current valuation of the Utilities' facilities: approximately over \$115,200,000

As of September 2010, here is a list of active Utilities' customers as compared to Utilities' employees.

Electric: 6,903 Gas: 5,360 HUC employees: 57

Maximum peak hour demand to date: 65.4 megawatts (MW) on July 31, 2006 Maximum peak hour demand in 2009: 57.9 megawatts (MW)

Miles of Distribution line: Overhead: 4.45 Underground: 140.67 Total: 145.12



### **HUC's Generating Units**

Manufacturer	Year Installed	Fuel	KW Rating	
McIntosh & Seymour	1936	Oil	430	Retired from Service
McIntosh & Seymour	1936	Oil	430	Retired from Service
McIntosh & Seymour	1937	Oil	430	Retired from Service
Nordberg	1938	Oil	1,000	Retired from Service
Busch-Sulzer	1947	Oil	2,140	
Nordberg	1956	Oil-Gas	2,200	Scrapped Out
Nordberg	1958	Oil-Gas	2,000	
Nordberg	1962	Oil-Gas	4,500	
Worthington	1967	Oil-Gas	4,000	
Worthington	1967	Oil-Gas	4,000	
General Electric	1971	Turbine	15,000	
Curtiss-Wright	1976-1999	Turbine	22,080	Engine was destroyed
General Electric	2000	Turbine	22,080	
LM 6000	1994	Turbine	42,500	

#### Past and Present Hutchinson Utilities Commissioners

Richard Dahl, 1936-1960
Dr. A.J. Thompson, 1936-1964
Dr. R.I. Sheppard, 1936-1966
Wallace Kurth, 1960-1962
Howard P. Quade Sr., 1962-1980
Clint Tracy, 1964-1982
Herb W. Filk, 1966-1984
Eugene "Bud" Daggett, 1980-1992
Thomas Lyke, 1982-1993
Theodore R. Beatty, 1984-1995
W.T. Richards, 1988-1992
Jerry Cornell, 1988-1997

Mike Carls, 1993-1999
Doug Ward, 1992-2000
Roger Gilmer, 1992-2002
Paul Ackland, 1995-2005
Steve Cook, 2006-2007
David Wetterling, 1997-2009
Donald Walser, 2000Craig Lenz, 2000Dwight Bordson, 2005Robert Hantge, 2006Paul Nordin, 2010-

# Former and Current Superintendents/General Managers of Hutchinson Utilities

Richard Strohmeier, 1936-1942 R.E. (Ralph) Young, 1943-1972 H. Steve Wacker, 1972-1975 Rufus Alexander, 1976-1986 Ruth Hakel, 1986-1988 Clarence Kadrmas, 1988-2002 Patrick Spethman, 2003-2004\* Mike Kumm, 2004-

<sup>\*</sup>Interim General Manager

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## **End Notes**

The Public Works Administration was created by the National Industrial Recovery Act on June 16, 1933. The PWA budgeted several billion dollars to be spent on various projects as a means of providing employment, stabilizing purchasing power, improving public welfare, and contributing to a revival of American industry during the Great Depression.

<sup>&</sup>lt;sup>1</sup> "Light Plant Completely Paid For, Helps Keep City Up and Taxes Down," *Hutchinson Leader*, June 21, 1955, sec. 5, page 1.

<sup>&</sup>quot; Hutchinson Leader, March 22, 1935.

iii Jim Dahl and Elsa Young, interview by Johanna Hanneman, Hutchinson, June 29, 2009.

iv Flsa Young

<sup>&</sup>lt;sup>v</sup> Frank Bargen, *25 Years of Progress*: *25<sup>th</sup> Anniversary Report* (Hutchinson Utilities Commission: Hutchinson, 1962), page 6.

vi Hutchinson Leader, March 8, 1935, page 1.

wii Municipal Electric Utilities of Wisconsin, "The Municipal Electric Utility Advantage," (MEUW, 2009), http://www.meuw.org/advantages.htm (accessed June 14, 2009).

viii Hutchinson Leader, March 8, 1935, page 3.

ix Bargen, page 6.

<sup>&</sup>lt;sup>x</sup> Eleanor Roosevelt National Historic Site, "Public Works Administration," (The Eleanor Roosevelt Papers, 2003), http://www.nps.gov/archive/elro/glossary/pwa.htm (accessed June 28, 2009).

xi Bargen, page 7.

xii Bargen, pages 7 to 9.

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xiv Dean Urdahl and Mary Alice Holm, Leading the Way...Lighting the Way...Meeker Cooperative Light and Power Association: Seventy-Fifth Anniversary (Meeker Cooperative Light and Power: Litchfield, MN, 2010), page 4.

xv New Deal Network.

xvi Bargen, page 9.

xvii The McLeod Cooperative Power Association was the local branch of the Rural Electrification Administration.

xviii Bargen, page 9.

<sup>&</sup>lt;sup>xix</sup> Hutchinson Utilities Commission Minutes. Yet, Council members have always had the power to veto a rate proposition brought forth to them by an employee of the Utilities Commission.

xx Elsa Young and Jim Dahl.

xxi Hutchinson Utilities Commission notes.

xxii Bargen, page 10 to 12.

xxiii Hutchinson Leader, Dec. 4, 1936.

xxiv Hutchinson Utilities Commission Minutes, September 29, 1936

xxv Hutchinson Utilities Commission Minutes, August 7, 1939.

<sup>\*\*</sup>xvi "50 Years Ago", Hutchinson Leader, October 25, 1988.

Bargen, page 13.

xxviii Bargen, page 14.

xxix Bargen, page 14.

xxx Light and Power Plant Commission letter to Lars Leifson, President of MCPA, January, 1940.

xxxi Upper Great Plains Wind Energy, "Electric Transmission and Transmission Facilities," (accessed on June 15, 2010), http://plainswindeis.anl.gov/guide/transmission/index.cfm.

xxxii Bargen, page 16. Also found in Hutchinson Utilities Commission Minutes, November 4, 1941.

xxxiii Hutchinson Utilities Commission Minutes, Adjourned Meeting, Resolution 29, July 9, 1942.

xxxiv Hutchinson Utilities Commission Minutes, March 14, 1945.

Firm capacity is calculated on the basis that the large unit may be taken out of service for repairs.

xxxv Hutchinson Utilities Commission Minutes, November 4, 1946.

The Federal Power Commission was created by the Federal Water Power Act of 1920; its original purpose was to administer the licensing for hydroelectric projects. In 1935, a new Federal Power Act was created. The responsibilities pertaining to the nation's electric power supply and authority to regulate rates was now under its jurisdiction. 21 years later, the United States Supreme Court ruled in 1956 that the "rates and sales of independent producers selling natural gas in interstate commerce were also subject to FPC jurisdiction." Today the FPC is known as the Federal Energy Regulatory Commission (FERC).

The term "interchange" means an accord among interconnected utilities to purchase, sell, and/or between swap surplus energy between the participants.

xxxvi Hutchinson Utilities Commission Minutes, April 10, 1952.

xxxiii Harold R. Popp, "Questions and Answers: On Hutchinson's Proposed Municipal Gas Distribution System," *Hutchinson Leader*, December 2, 1954.

xxxviii By this time, the Commission had acquired one dual engine that could function on either oil or gas. Hutchinson Utilities would go onto own a total of five dual engines.

xxxix Philip L. White, letter to the editor, "Vote Yes on Friday," *Hutchinson Leader*, December 16, 1954, page 7. xl Bargen, page 20.

xli Harold R. Popp, Hutchinson Leader.

History Channel, Encyclopedia, "Federal Power Commission," (A & E Television Networks, 1996-2009), http://www.history.com/encyclopedia.do?articleId=209116 (accessed August 12, 2009).

<sup>&</sup>quot;City Makes Bid for Municipal Gas Plant," Hutchinson Leader, November 13, 1954, pages 1 and 5.

xliv "City Makes Bid for Municipal Gas Plant," Hutchinson Leader.

xlv Hutchinson Utilities Commission Minutes, March 7, 1955.

<sup>&</sup>quot;Contracts Let For New \$300,000 Addition to Municipal Plant," *Hutchinson Leader*, March 24, 1955, pages 1 and 8.

<sup>&</sup>quot;Gas Survey Begins; City Case Up for FPC Hearing in 2 Months," *Hutchinson Leader*, January 13, 1955, pages 1 and 6.

xiviii "No Chance for Gas Prior to Next Year," Hutchinson Leader, April 21, 1955, pages 1 and 8.

xlix "No Chance for Gas Prior to Next Year," Hutchinson Leader.

Hutchinson Utilities Commission Minutes, Special Meeting, April 11, 1959.

<sup>&</sup>lt;sup>li</sup> Hutchinson Utilities Commission Minutes, *Resolution 67*, October 13, 1959.

iii Hutchinson Leader, December 31, 1959, page 1.

Orville Kuiken, interview by Johanna Hanneman, Hutchinson, July 20, 2010.

liv Hutchinson Utilities Commission Minutes, November 7, 1960.

President R. I. Sheppard, Vice President A.J. Thompson and Commissioner Wallace Kurth, letter to the editor, *Hutchinson Leader*, August 18, 1960, page 1.

hi Hutchinson Utilities Commission Minutes, Special Meeting, March 23, 1962.

<sup>&</sup>quot;Municipal Plant Has Record Net Profit in Past Year: Gas Division Shows Loss of \$49,000," Hutchinson Leader, May 30, 1962, vol. 82, nu. 43, page 1.

hutchinson Utilities Commission Minutes, July 10, 1962.

lix "Municipal Plant Has Record Net Profit in Past Year: Gas Division Shows Loss of \$49,000," *Hutchinson Leader*, May 30, 1962, vol. 82, nu. 43, page 1.

<sup>&</sup>quot;Council, Utilities Commission Meet," Hutchinson Leader, July 25, 1962, vol. 82, nu. 59, page 1.

<sup>&</sup>lt;sup>lxi</sup> "New Electric Rates to Take effect April," *Hutchinson Leader,* February 26, 1965, vol. 85, nu. 17, page 1.

<sup>&</sup>lt;sup>kii</sup> "Light Plant Tops One Million Dollars in Contributions," *Hutchinson Leader,* January 14, 1966, vol. 86, nu. 4, sec. A, pages 1 and 2.

later Change Service Agreement between the City of Hutchinson and Rural Cooperative Power Association, October 11, 1965.

later Connection and Interchange Agreement between the Rural Cooperative Power Association and Hutchinson Utilities Commission, October 11, 1965, sec. 3.05.

hutchinson Utilities Commission Minutes, October 18, 1966.

hutchinson Utilities Commission Minutes, January 12, 1967.

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lxvii Hutchinson Utilities Commission Minutes, Special Meeting, October 1, 1968.
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www.econreview.com/events/wageprice1971b.htm (accessed June 12, 2009).

These propane peak-shaving systems produced "propane-air" for direct replacement of natural gas during peak demand periods (meaning the point at which demand would reach its highest level). Propane-air was a combustible gas created by the mixing together of liquid propane and air then it was blended with the natural gas. The peak-shaving plant had to inject BTUs of gas into the system so that it would burn at the same level as natural gas. When injecting such amounts, the average customer was not able to differentiate between the quality and source of the gas.

U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, "Introduction to Pipelines," (1998-2003), www.phmsa.dot.gov/staticifiles/PHMSA/Pipeline/Intro\_to\_Pipeline/ (accessed June 28, 2010).

A town border station is "a location at which gas changes ownership from one party to another (usually from a transmission operator to a distribution operator), neither of which is the ultimate consumer of the gas. A town border station is also referred to as a city gate station."

lxxxiii Hutchinson Utilities Commission Minutes, June 14, 1972.

"Electric, gas rates up 10.6 percent April 1," *Hutchinson Leader*, March 16, 1973, vol. 93, nu. 22, sec. A, pages 1 and 2. Similar information can be found in a letter addressed to the Mayor, by Steve Wacker, March 13, 1973.

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