

Generation for the Generations



Some events define bistory,

like KUA's 100-year annivervary.

And some events define a generation,

like September 11, 2001.

With this report, KUA commemorates both.

May we now look to the future

of our utility, our community and our nation

with strength, promise and bope.



(left to right) Bill Hart, Director; Jim Welsh, President & General Manager; Don Shearer, Vice Chairman; Nancy Gemskie, Assistant Secretary; Larry Walter, Chairman; Dr. George Gant, Mayor of Kissimmee; Ed Brinson, Attorney; Domingo Toro, Secretary, with flags that flew over the U.S. Capitol and Kissimmee City Hall on June 28, 2001 – KUA's Centennial anniversary.

Generation for the Generations

Annual reports are traditionally a time to reflect. To review the past year and comment on what it means for the years to come.

As this is KUA's 100th year, that tradition takes on new meaning. For ten decades, KUA has been part of the growth, development and progress of the community we serve. For generations, we have been committed to providing an adequate and reliable source of power.

We show in this report the mutual history of our city and our utility, from as far back as the camera could record it. And we try to put in perspective the relevance of municipal power since the city of Kissimmee purchased the system in 1901. Back then, we served three customers. Today, we serve some 53,000. While the numbers have changed dramatically, our goal hasn't: customer service, not-for-profit rates, community ownership and local control.

It's a formula that has stood the test of time for 100 years. Let it be so for 100 more.

and Olto W. Walter Larry

Larry W. Walt Chairman

James C. Welsh James C. Welsh

James C. Welsh President & General Manager



Four employees of the Kissimmee utility on a pole in point of the Preystone Casino. Clockwise from top lift: Juy Gardener, Jamie Buckets, Edward Roberts, and Charles Cain

KUA Centennial History

Public power came to Kissimmee 100 years ago.

ams

The pioneer vision that led the citizens of Kissimmee to vote to own and operate the city's electric utility in 1901 has paid untold benefits to residents in the century since then. The people of Kissimmee have enjoyed low rates and reliable electricity for most of the past 100 years. More importantly, they have benefited from the energy independence that public power brings to communities across America. Revenues from the operation of the utility stay within the community and help support a better quality of life for all Kissimmee residents. Public power had become a reality in the U.S. with the 1880 experiment with municipal ownership of the electric power facilities in Wabash, Indiana. Technology was driving the electrification of cities and towns across America. Thomas Edison's work in the 1870s led to the creation of a practical incandescent electric light bulb in 1879, and Edison unveiled his first practical generating station at Pearl Street in New York City in 1883.¹

Edison's experiments were being duplicated by others across America during the 1880s and early 1890s. Charles Brush of Cleveland had designed the arc lights installed on the roof of the courthouse in the Wabash town square in 1880.² In Lynn, Massachusetts, inventor Elihu Thomson was designing incandescent and arc lighting systems that at the time were considered better than Edison's.³

Early electric entrepreneurs such as Edison, Brush and Thomson envisioned making money from the newfangled concept of electric power in two ways. They would provide the equipment needed to generate and distribute electric power directly to cities and towns, and they would license franchisees to sell their equipment in specific regions of the country. Franchisees were essentially middlemen, taking a commission on the sale and operation of electric light plants in their region and in turn paying an agreedupon fee to the electrical manufacturers.

		_	
Like any 19th century entrepreneurial activity, the sale	FROM ALLENDALE TO KISSIMMEE	Disston primarily envisioned an agricultural paradise. Disston crews	AN IMPASSIONED PLEA
of electrical equipment was frequently messy and rife		flooded into Osceola County in 1881 and 1882, dredging creeks and	
with graft and kickbacks. Little wonder, then, that cit-	At about the same time that Thomas Edison was start-	rivers to improve flow and lower the water table in the marshlands. As	If it's possible to put a date on Kissimmee's desire to have a func-
izens in communities across America early on began to	ing up the Pearl Street station in New York City, set-	early as 1882, Disston began to plant sugar cane on hundreds of acres	tioning electric light system in the
investigate the feasibility of municipal ownership of	tlers in what would become Osceola County, Florida	of land adjoining East Lake Tohopekaliga, which had dropped five feet	community, then September 5, 1899

As a political concept, public power had grown out of the Progressive Movement in late 19th century America. Progressives believed that electric and water utility services were as vital to the health and wellbeing of American communities as the maintenance of streets or the construction of sewage treatment facilities.

electric light plants.

A growing number of citizens agreed with the Progressives. City officials in Kissimmee no doubt had kept abreast of the virtual explosion of public power in the country during the 1890s. Hundreds of U.S. communities elected to own and operate electric systems during the decade. By 1900, there were more than 800 municipally-owned electric systems in the U.S.⁴

Ownership of the electric utility meant independence for the people of Kissimmee. Profits from the sale of electric power would remain in the community and not line the pockets of investors in Philadelphia, Baltimore or New York City. Public power kept electricity costs down and created a sense of control of its energy destiny for the community. That is as pertinent today as it was 100 years ago.

tlers in what would become Osceola County, Florida were meeting to incorporate Kissimmee's predecessor community.

Settlers had come into the Kissimmee River Valley to raise cattle as early as the 1850s. The undrained river valley was made up of scrub pine and swampland, and the vast prairie marshes were perfect for raising and holding cattle. By the 1870s, Florida rivaled the Great Plains and the territories for its cattle-raising industry. At the end of the decade, more than half-a-million head of cattle roamed the prairie marshlands of Central Florida.⁵

Most of those early settlers were transplants from Georgia and north Florida, but after 1880, wealthy northerners began buying huge tracts of Central Florida land. Chief among them was Hamilton Disston, the descendant of a Philadelphia manufacturing family. Disston and his father had made a fortune manufacturing saws in the City of Brotherly Love during the 1870s. In 1881, Hamilton Disston purchased four million acres of Central Florida cypress swamp and began dredging canals to drain the marshland.⁶ Disston wasn't the first, and he wouldn't be the last. wealthy Yankee to envision striking it rich from Florida real estate.

of land adjoining East Lake Tohopekaliga, which had dropped five feet following dredging.⁷ Disston also erected sugar cane processing facilities, the first industry in the Kissimmee River Valley.

Even before Disston's crews arrived, settlers had populated a tiny hamlet on the shores of Lake Tohopekaliga. Called Allendale after the community's first mayor, who was from Kentucky, the tiny settlement supported itself with commercial fishing on Lake Toho and selling supplies to cattle ranchers in the surrounding cypress swamps. There was a steamboat landing in the community, and when the first narrow gauge railroad came through town in 1882, Allendale's population started to grow.

In January 1883, the citizens of Allendale voted to incorporate. A judge ruled the ballot invalid because too many voters had taken part in the election. Two months later, on March 24, 1883, the voters trooped to the polls again and voted by a 10-1 margin to incorporate. They took the name Kissimmee City for their new town.8

A YEARNING FOR LIGHTS

Kissimmee was a typical Central Florida town during its first decade of existence. Clapboard storefronts sprouted up downtown along West Broadway, and the streets were either choked with dust or ankle-deep in mud. Most of the city services that today's residents take for granted were either non-existent or rudimentary.

community, then September 5, 1899 is as good as any.

On that sultry late summer evening, Kissimmee Mayor J.W. Sears Jr. got up in council chambers and made an eloquent plea for bringing Kissimmee into the 20th century - a century that was fast approaching in grand style.

"We must have electric lights," Sears stated in unequivocal terms. *"If there is one thing we need more"* than a water works. it is electric lights. The lights we have are utter*ly useless. They are a mere pretense;* a mere protection for violators of the *law as they enable them to locate the* Marshall,"

Sears was referring to the kerosene street lamps that had lighted the downtown area since the early 1890s. Kerosene lamps were smoky, and they gave off an unpleasant odor. Worst of all, they barely illuminated a small patch of ground immediately below the lamp.

"We are at a considerable expense to keep up these lights and with only a small additional cost could secure

The teddy bear is introduced. named for President Theodore Roosevelt.

sisting of 9.1 miles of track.

Einstein proposes his theory of

1937	1938	1939	1940	1941	<i>1942</i>	1943	1944	1945	1946	1947	1948	1949	1950	1951	<i>1952</i>	1953	

In the early 1890s, smoky kerosene lamps illuminated downtown streets on moonless nights. J.J. Woodall made the rounds of downtown streets every evening at dusk, placing a ladder against the wooden poles and climbing up to light the kerosene lamps.⁹ Residents frequently complained about missing their step on the dilapidated board sidewalks, and city officials daily read newspaper and magazine articles extolling the virtue of electric street lighting.

In December 1891, then Mayor J.C. Leak prevailed upon the city council to appoint an electric light committee to study the issue. The committee quickly reported back to the mayor and council that it had prepared a plat showing the location of proposed street lights in the community. But the committee noted that it would be necessary to sell residential incandescent lighting to make an electric light plant a paying proposition.¹⁰

It was only a matter of time before Kissimmee got electric lights.

Events quickly moved ahead. In the spring of 1892, the council accepted a recommendation that the city bond \$23,000 for the purpose of establishing a public works department and building an electric light plant.¹¹

Plans called for the bond election to be held as soon as possible, but City Attorney P.A. Vans-Agnew gave the matter careful scrutiny. His caution was justified.

By August 1892, a group of citizens appeared before the council with a petition calling for them to rescind the April bond resolution. Their opposition to the original proposal wasn't to electric lights. Instead, they argued that Kissimmee shouldn't go too deeply in debt for luxuries the community couldn't necessarily afford. After talking the matter over, the council and dissident citizens agreed on a \$13,000 bond issue for the following April, which would be used for debt reduction, street improvements and construction of a new schoolhouse on Church Street.¹²

The ballot measure in April 1893 passed easily. The prudence of Kissimmee's conservative citizens who had opposed the electric light portion of the bond issue was eminently reasonable. By the summer of 1893, the national economy had started to turn sour. The resulting run on banks in the fall of that year triggered the Panic of 1893, the worst national depression between the 1870s and 1930s.

In Osceola County, Hamilton Disston's land and railroad empire collapsed within months. Back-to-back hard freezes during the winters of 1894 and 1895 wiped out sugar and other agricultural crops. Disston returned home disconsolate to Philadelphia in 1895. Early the next year, he killed himself in his Philadelphia mansion.¹³ For Kissimmee, it would be most of the rest of the 1890s before the local economy recovered from the Panic of 1893. Several proposals were made by local and Tampa investors in the latter half of the 1890s to build an electric light plant in the community, but all were rejected by the council.¹⁴

But as the new century neared, pressure began to mount for electric lights in Kissimmee and other Florida communities. The Florida Legislature had given municipalities a powerful tool in 1897 when it passed Progressive legislation that enabled "cities to develop plants to manufacture and distribute electricity for municipal use and for its inhabitants."¹⁵

It was only a matter of time before Kissimmee got electric lights.



Broadway in the 1930s

electric lights, " Sears continued with the core of his argument. "A plant could be put in for \$3,500. That will be sufficient and such a plant will, I believe, and I have studied it closely, in a very short time more than pay expenses. I have received letters on electric lighting and the above is the approximate cost. A great many citizens have been to me in the interests of the above suggestion and have been anxious to secure them at any cost."²

Sears' impassioned plea brought results. Within 18 months, Kissimmee had its light plant and electric arc street lamps downtown. Less than two years after Sears' remarks, the city itself was in the business of furnishing electric power to the people of Kissimmee.

1 KUA, "A Point in History: Kissimmee Utilities," n.d., p.4 2 Ibid., p.4

06 The nation's first diesel power plant begins operation.

7 First electric washing machine is introduced.

Kissimmee purchases a 25 kW Corliss steam engine to supplement the original 15kW steam engine and generator.

1908

09 Plastic is invented.



1961

migins

1960

Pross Graves Hardware in the early 1900s Kissimmee achieved municipal ownership in 1900-1901 in an atypical manner. Unlike many public power communities, which ended up in acrimonious disputes with private power companies over service issues, Kissimmee forged a harmonious relationship with a private citizen to build and operate the light plant until the city was able to pay for it. The city gained the expertise of a competent local mechanic who knew and understood the electric power equipment of the day. The investor made a tidy sum from the revenues of the plant in 1900 and 1901, and residents got electric lights two to five years earlier than they would have had the city chosen not to enter into the joint venture.

otric

Service

The investor's name was William C. Maynard, and he was a resident of Kissimmee. In the fall of 1900, just a year after Mayor J.W. Sears Jr. had implored the council to approve an electric light plant for the city, Maynard incorporated the Kissimmee Light Company and approached the City Council about serving Kissimmee with electric lights. On December 4, 1900, the city contracted with Maynard to furnish Kissimmee with electric power.¹

Maynard quickly put crews to work building a small, brick light plant on the shores of Lake Toho. The electrical system was powered by a 15-kilowatt generator, which was driven by a Skinner's steam engine. That first plant was up and running early in 1901 and supplied arc lighting in the downtown business district, as well as incandescent lighting to two residential customers, Carl Dan and W.B. Makinson Sr.²

9

12 The Titanic sinks.

1973	1974	1975	1976	1977	1978	1979	1980	1981	<i>1982</i>	1983	1984	1985	1986	1987	1988	1989	19

Street lighting at the turn of the last century was vastly different than it is today. Sputtering and crackling in the twilight and early evening, arc lights were the technological marvel of the day. Essentially a glass globe that contained two carbon rods, the arc lights gave off a brilliant light when a spark of electricity jumped between the two carbon rods.³

Arc lights were labor intensive and required the employment of a full-time trimmer to cut back the burnt-out carbon from the rods once or twice a week.⁴ But arc lights were still a giant technological leap over the kerosene street lamps that Kissimmee had employed since the early 1890s. Kissimmee Light Company charged the city \$7.50 per month for each arc light installed.

Arc lights, however, were inefficient when compared with the incandescent lighting systems that were then becoming more common in Florida and the United States. Incandescent lights were characterized by a softer glow, and unlike arc lights, were cool to the touch. Incandescent lighting came from filaments vacuum-enclosed in a glass bulb. The two initial residential customers paid three cents per night for each 16candlepower incandescent light installed.⁵

Once Maynard had the lakeside light plant running, the city decided to exercise its option to purchase the plant. At the April 3, 1901 council meeting, the city passed an ordinance providing for a special election to authorize the purchase of the electric light plant and

the resulting issuance of \$5,000 in bonds for paying off Maynard's investment in the plant.

Voters went to the polls one month later and voted in favor of the bond issuance by a 2-1 margin. On June 27, 1901, the city sold \$5,000 in bonds to finance the purchase.⁶ The ornately-engraved bonds were sold in denominations of \$500 apiece and were subscribed within hours of being issued.⁷

The council wasted no time in taking control of the light plant once the bonds were issued and subscribed. On June 28, 1901, councilors passed a resolution authorizing the purchase of the light plant from Maynard for the sum of \$4,293.59.8 Before the day was out, the council had appointed a council committee to oversee operations of the utility.⁹

The vote vindicated Mayor Sears' vision of two years before. Sears had been remarkably accurate in his estimate of what it would cost for the community to get into the electric power business. The price the city paid Maynard for the light plant was just under \$800 more than Sears had predicted the cost would be in 1899.

EARLY YEARS

Kissimmee was one of a rapidly growing number of Florida and U.S. communities that had successfully achieved municipal ownership of their electric utility systems in the years around the turn of the 20th cen-

tury. Starke had been the first Florida community to elect to own its light plant in 1890. Jacksonville, Ocala and Williston had voted for municipal ownership of their electric systems in 1895, 1898 and 1900, respectively. In 1901, residents of the state capital of Tallahassee were debating municipalization of the electric utility and would vote to do so the following year. Voters in Blountstown and Bartow followed suit with municipal ownership elections in 1903.10

Kissimmee was the fifth community in Florida to opt for public power. Florida at the turn of the 20th century lagged behind the rest of the nation in the trend toward public ownership of electric utilities. By 1900, there were more than 800 municipally-owned electric systems in the U.S.¹¹

Just before 10 p.m. each night, the operator at the light plant would flick the power off and on . . .

The reasons for this apparent lack of enthusiasm for municipal ownership in Florida were complex. For one thing, Florida didn't have the Progressive and Populist political tradition that was more widespread in the Midwest and urban Northeast. More importantly, Florida was primarily a rural, agricultural state at the turn of the 20th century. Florida's urban population in the 1900 census was just over 100,000 people, only 20 percent of the state's total population of 500,000.¹² Jacksonville, Key West, Pensacola and Tampa, the state's biggest cities in 1900, all had populations of less than 20,000 people.¹³ Cities such as Orlando, Ft. Myers, Miami and Naples were still only hamlets in 1900.

KISSIMMEE IN 1914

As Europeans mobilized to fight what historians would come to call the Great War in the summer of 1914, Kissimmee was establishing itself as a bright spot in the Central Florida economy.

The city had ballooned to a population of 4.200. 600 of whom were African-Americans. The city reported an assessed valuation of just over S1.4 million and an actual market value of \$3 million. Kissimmee's bonded indebtedness was only \$120,000. The local Board of Trade and the Ladies' Civic League undertook extensive beautification efforts on the city's one-and-a-half miles of lakefront on Lake Toho.

Kissimmee boasted four miles of brick streets in its downtown area. 16 miles of concrete sidewalks, and five miles of canals for surface drainage. The city was perhaps proudest of its municipal utilities. The municipally-owned water and light plant was valued at \$150,000, more than 10 percent of all the assessed value of property in Kissimmee.

The community's water system included a 68,000-gallon reservoir, an elevated steel tank 130 feet high, with a capacity of 75,000 gallons, and 16 miles of water mains. Two

Personal income tax is introduced in the U.S.

Electric power comes to St. Cloud to furnish light to the St. Cloud Hotel.

The Lusitania is sunk by a German U-boat.

1992

1994 1

1998

906 1



Kissimmee's municipal electric system remained small through the first 15 years of the 20th century. In 1908, as demand grew for incandescent lights and electric appliances, the city purchased a new 25-kilowatt Corliss steam engine to supplement the original 15-kilowatt steam engine and generator. At the same time, electricians boosted the voltage on Kissimmee's system to 1,100 volts. Three years later, in 1911, the voltage was increased to 1,400 volts. At that time, the Kissimmee utility had only 50 incandescent light customers.¹⁴

Still, Kissimmee was years ahead of its neighbor, St. Cloud. Electric power did not come to the community on East Lake Toho until 1914, when the Seminole Land Development Company installed a 25-kilowatt generator to furnish light to the St. Cloud Hotel. Two years later, the city of St. Cloud purchased two, 100horsepower Fairbanks Morse steam engines, each with a 62.5-kilowatt generator, to run the pumps in the city's municipally-owned water system. At about the same time, the city acquired the Seminole Land Development Company's electric generator and began serving residential customers as a municipal utility in 1916.¹⁵

The St. Cloud municipal utility in 1916 operated a larger generating plant than Kissimmee did. But the St. Cloud utility had located an ice plant immediately adjacent to the light plant. Since the ice plant produced more ice than could be consumed locally, the surplus ice was shipped by rail to customers in Kissimmee and Orlando.¹⁶

In the days before World War I, both the Kissimmee and St. Cloud municipal electric systems operated on what was called a "moonlight schedule." The plants for the two utilities shut down each night at 10 p.m. On bright, moonlit nights, the arc street lights in the two communities didn't operate. Just before 10 p.m. each night, the operator at the light plant would flick the power off and on, signaling to residential lighting customers that the plant would close down for the night within 10 minutes.¹⁷

Like many municipally-owned utilities in pre-World War I America, Kissimmee's municipal utility was small and struggling. The character of the community was primarily agricultural. But an emerging tourism business and Osceola County's reputation for some of the finest beef cattle grazing land in Florida would help the Kissimmee municipal utility grow rapidly during the 1930s and 1940s.



Crane pumps, with a capacity of 500 gallons-per-minute each, handled water drawn from an eight-inch artesian well that was drilled to a depth of 379 feet. In the Summer of 1914, crews were installing a second 12-inch well.

Kissimmee's school system educated 800 students a year, and a private hospital maintained two wards and eight private rooms. The city was served by the Atlantic Coast Line Railroad; passengers could connect to the Seaboard Air Line Railroad at the nearby rail junction in Apopka.

The economy was booming, with demand high for Osceola County beef, agricultural produce and forest products. Kissimmee's business establishments in 1914 included three large citrus fruit packing houses, a fish-shipping warehouse, a lumber mill, a planing mill, an orange crate manufacturer, a dairy, an 80-acre truck garden, and two cigar factories.'

1 "Resources of Osceola County," Kissimmee, 1914, pp.17-18

13

919 Prohibition begins in the U.S.

my was outstripping the ability of the Kissimmee light plant to supply it with electric power.

The City Council committee governing the affairs of the municipal utility was in a quandary about how to meet the growing electric power demand. Building a larger steam plant was rife with problems. Central Florida was a long way from the Eastern coal fields. Even though Kissimmee was located along the Atlantic Coast Line Railroad, freight rates for coal hauling would be prohibitive for a large, baseload, coal-fired steam generating plant. Labor problems continued to plague the Eastern coal fields during the 1920s, as John L. Lewis' United Mine Workers fought to organize the industry.

The electric light committee also had to consider the costs of building the plant too large. Kissimmee's population and electric demand were rising, but if the committee built too large a plant, it might be years before it could pay off its bonded indebtedness for construction costs.

Hansel at the 1976 declication of the Roy Hansel Generating

Roy and Dorothy

21 The lie detector is invented.

Kissimmee's municipal electric utility entered the

The five years following the 1918 armistice ending

World War I had been difficult years for Kissimmee

and its municipally-owned electric utility. Labor prob-

lems in the Eastern coal fields in 1918 and 1919 had

disrupted the supply of fuel to the city's steam plant.

Like many municipal utilities up and down the

Eastern Seaboard, the Kissimmee light plant was

forced to reduce hours of operation to cope with the

A nationwide agricultural recession characterized the

early 1920s. Although employment in the citrus groves

and truck farms of Osceola County declined, employ-

ment in the growing Central Florida tourism industry

grew rapidly through the decade. Kissimmee's econo-

diesel generation era in 1923.

fuel shortages.



1914

1912

1913

1910

FOOD

BALLTSPEETS.

City applauds

Hansel service

Roy E. Hansel, city employe

interim

periods

without one.

city

when

manager during

was

the city

Hansel's wife and family were on hand as Mayor Jake Clemons

		_	
Kissimmee's solution to power supply problems was	KISSIMMEE'S FULTON DIESELS	the committee signed a contract for delivery of diesel	ROY
one adopted by hundreds of small-town utilities dur-		fuel from a distributor located at the Port of Tampa.	
ing the 1920s. The answer to Kissimmee's problem	Kissimmee's 1923 decision to purchase and install two		For nearly 30 years, Kissimmee Light & Water's public face was Roy Hansel.
was a World War I technology: the diesel engine.	diesel engines was one that would be made by public	With the addition of the two new diesel units, the city	Tate was noy Hansel.
	power communities from Idaho Falls, Idaho to	was able to retire the original steam engines and	Hansel, who took over as utility superintendent in 1943,
In 1923, the Kissimmee municipal utility installed its	Cedarburg. Wisconsin during the 1920s and 1930s.	expand service to include the entire city limits. Two	retired from the same job in 1972. During that 29-year

first two diesel engines.1 The diesel engine was a power source that was becoming increasingly popular in the 1920s. Invented and patented in 1892 by Rudolf Diesel, a German mechanical engineer, the diesel engine originally was designed for the emerging European automobile industry. But because the diesel uses highly-compressed, high temperature combustion to ignite fuel oil, it soon found increasing employment in industrial applications.²

Diesel's 1895 engine, with a four-stroke cycle and 450 psi compression, became the model for diesel engines still in use today.³ By 1900, several American licensees of the diesel patents were making the high-efficiency engines. Diesel engines quickly replaced wood and coal-fired engines for pumping and manufacturing usages. After 1904, they became progressively more common when used for ship propulsion. The first diesel power plant was introduced in 1906.⁴

The diesel engine came into its own during World War I. Most of the German U-boat fleet operated on diesel engines, and the British Navy ordered 60 diesel marine engines to power submarine chasers.⁵ American doughboys were accompanied onto the battlefields of France by diesel trucks and diesel engines for power supply.

urg, vvisconsin during the 1920s and 1930s. Diesel engines proved to have several advantages for communities that operated light plants.

They were big enough to carry the typical small-town load of incandescent lighting, street lights and household appliances. They were modular, in the sense that a second, third or fourth diesel could be quickly and easily added to the community's light plant. They ran on relatively cheap and abundant distilled fuel oil.6 And they were up to seven times as heat efficient as a similar-sized steam engine.⁷

Diesel engines made rapid inroads into community electric power generation in the 1910s and 1920s. In 1903, there were only three experimental diesel power plants in the U.S. By 1930, small-town light plants most of them public power facilities - had nearly 400 diesel engines in use in the United States. Diesel engines in 1930 accounted for more than 40 percent of the total number of generating units in operation in the country.8

The advantages of the diesel engine appealed to Kissimmee's electric light committee. In 1923, the committee purchased its first diesels, a three-cylinder, 175-kilowatt unit, and a four-cylinder, 225-kilowatt unit, from the Fulton Engine Co.⁹ At the same time,

expand service to include the entire city limits. Iwo years later, in 1925, the utility's customer base had grown to just over 200 residences and businesses. The electric light committee entered into a purchase agreement with the Fulton Engine Co. for a third diesel to help carry the system's expanded demand. The new unit was a 750-horsepower Fulton Model J Engine, driving a 500-kilowatt generator, essentially doubling the light plant's capacity.¹⁰

Nearby St. Cloud also entered the diesel era in 1925. The St. Cloud municipal utility in 1920 had installed a Fairbanks Morse gasoline engine that was directly connected to a 125-kilowatt generator. Growth of the city's hotel and tourism business in the early 1920s necessitated expansion of the St. Cloud light plant. In 1925, the municipal utility installed a Fairbanks Morse six-cylinder, 200-horsepower engine to power a 400kilowatt generator.11

Kissimmee would be primarily a diesel generation system for nearly 40 years, until natural gas became available in the late 1950s. By the 1960s, the city began to avail itself of wholesale power from large baseload coal and nuclear plants operated by larger utility neighbors.

span, he kept the diesel engines running in the lakefront plant, climbed poles, installed transformers, hired and fired personnel, made out utility budgets, swept the floor, and did anything and everything that needed to be done to keep Kissimmee Light & Water running smoothly. In his spare time, he pitched in when the Osceola County Sheriff's Department was short of manpower, helped feed the animals in the zoo, and filled in as vacation relief for other city department heads.

Born in Kissimmee in 1907, Hansel was a third-generation resident of the community. His father drove the town garbage truck, and young Roy went on the city street crew when his formal education ended after the ninth grade. Hansel sometimes worked as a fill-in on the municipal utility line crews. When an opening occurred at the diesel plant in 1932, he quickly applied for the job.

For much of the 1930s, Hansel worked the night shift at the power plant. At the encouragement of James (J.C.) Buckels, then the plant manager and utility superintendent, Hansel took coursework in electrical engineering at the University of Florida extension service. Buckels had taught his young apprentice everything he knew, and Hansel successfully passed a power plant manager's exam in the late 1930s, one of five people in the nation who passed the exam without a college degree.¹ When Buckels retired in the midst of World War II, the electric light committee named Hansel the utility's superintendent.

For most of the next 20 years, until the city created a separate Public Works Department in 1963, Hansel was in charge of the community's electric, water and sewage oper-

16

Kissimmee's municipal electric utility

France hosts the first Olympic winter games.

St. Cloud's utility enters the diesel era.

A.A. Milne publishes Winnie the Pooh.

1944	1945	1946	1947	1948	1949	1950	1951	<i>1952</i>	1953	1954	1955	1956	1957	1958	1959	1960	1961

THE GREAT DEPRESSION

The city's electric light committee could have been forgiven for expecting that Kissimmee would have to add another diesel within several years to meet anticipated load growth. But the Fulton diesel installed in 1925 would carry the community's load for 15 long years.

The reason was the onset of the Great Depression. The collapse of the stock market on Wall Street in October 1929 ushered in the worst economic setback in the nation's history. The Great Depression hit Kissimmee and Osceola County hard. For citrus growers in Osceola and Orange counties, the Great Depression began during the 1929 growing season, when the Mediterranean fruit fly was discovered infesting an orange grove south of Orlando.¹²

Conditions in Kissimmee and Osceola County deteriorated rapidly. Between 1929 and 1931, a number of banks failed in Central Florida. By 1932, there were more banks in the state in the process of liquidation than in operation.¹³ Several thousand people in Osceola County were on relief by the end of 1931. Unemployment in Central Florida hit 26 percent by the time President Franklin D. Roosevelt was inaugurated in 1933.¹⁴

The city-owned electric utility did what it could to lessen the suffering. Unlike many businesses, electric utilities were comparatively unaffected by the Great Depression. Although unemployment rates in Osceola County and nearby Orlando approached a quarter of the working-age population in 1933 and 1934, that still meant that 75 percent of the population was working. And that 75 percent continued to purchase household electric appliances. All those new electric appliances meant that kilowatt-hour demand at the Kissimmee municipal utility remained relatively strong.

"The system continued to grow," recalled Roy Hansel, who joined the crew at the power plant in 1932. "Although, during the Depression years, the growth was slow."¹⁵

Kissimmee Light & Water kept rates as low as possible during the 1930s and worked with customers who had fallen on hard times. Customers received discounts for on-time payments of their electric bill, and the utility helped contribute to the county poor relief fund.

By 1938, the area was recovering from the worst effects of the Depression. The Kissimmee municipal utility was beginning to plan for the future. Those plans included upgrading both the transmission and generation components of the system.

Until 1939, Kissimmee Light & Water was an electric island, unconnected to any other Central Florida utility. So, too, was the St. Cloud municipal utility. What that meant was that if either utility had a generator emergency, then the other could not come to the aid of its neighbor. In 1939, the electric light committee and its counterpart in St. Cloud came to a cost-sharing agreement on the construction of a nine-mile, low-voltage transmission line connecting the two communities. The 8,320volt transmission line was small by today's standards, but it gave utility operators in both communities a big measure of comfort.

"Although the voltage of the 'tie line' would not be considered significant by today's standards," Roy Hansel noted in 1970, "the voltage level of 8,320 volts was adequate for the capacity of 450 kilowatts over the distance separating the two communities. Interconnection to provide support for emergencies was practiced through the late 1930s into the 1950s."¹⁶

Interconnection with St. Cloud was only one of the steps that the electric light committee took at the end of the 1930s to upgrade Kissimmee's electric system. Two of the utility's three diesel generators were 15 years old, and in 1940, the utility purchased and installed a 1,090-horsepower American Locomotive diesel engine, which drove an 800-kilowatt generator.¹⁷ For the first time, the Kissimmee utility began burning bunker C, a thick, heavy fuel oil that had to be heated before it was fed into the diesel engines.

The electric light committee had acted just in time. The new diesel would have to carry the community's load through the long years of World War II. ations. In those days, his daughter Betty Galloway recalled, "He knew everybody in town and their dogs."² Hansel was legendary for squeezing a nickel until it squealed. Budget time was more often than not in those days an exercise in cost-cutting. Hansel frequently would tell his crews that the budget was so tight that they would have to bring their own toilet paper to the plant.³

As a public power employee, Hansel never forgot that he worked for the people of Kissimmee. Once in the late 1940s, the power was out, and a local woman called Hansel to complain that a power plant operator had been rude to her when she called to inquire about the outage. Hansel went down to the plant and confronted the operator. The operator explained that he was too busy to talk and had hung up on the woman.

"Well, then," Hansel replied, "you might as well pack up your things and leave, because that lady pays our salary."

Hansel treated everybody equally, and he had a welldeserved reputation for being blunt. "If you didn't really want to know what he was thinking, then don't ask him," recalled his daughter.⁵

Roy Hansel loved to fish and hunt in the cypress swamps and prairie marshes of Central Florida. He played golf and poker and doted on his children and grandchildren. When he retired in 1972, he had been working for the city of Kissimmee in one capacity or another for half a century.

In 1976, Kissimmee Light & Water recognized his contributions to the utility and the community by naming the lakefront power plant the Roy Hansel Generating Station. Three years later, in June 1979, Roy Hansel died at the age of 72.

1 Oral History Interview with Betty Galloway, Kissimmee, Florida, February 27, 2001 2 Ibid. 3 Ibid. 4 Ibid. 5 Ibid.

18

Mickey Mouse makes his debut in the animated cartoon "Steamboat Willie."

9 Citrus growers in Osceola and Orange counties discover an infestation of the Mediterranean fruit fly. 9 The stock market crashes.



and Peace

The Japanese attack on the U.S. Naval Base at Pearl Harbor, Hawaii on December 7, 1941, ushered in an era of unprecedented activity for Kissimmee Light & Water. Utility personnel coped with shortages of manpower and material, while trying to keep up with defense-related load growth.

The Kissimmee utility was better prepared than most for the onset of total wartime conditions. The utility had completed a low-voltage transmission line to St. Cloud in 1939 and had installed a diesel engine, 800kilowatt generator in 1940. At the beginning of the war, the utility had generating capacity of 1,566 kilowatts and could exchange power with St. Cloud, which had 600 kilowatts of diesel capacity.¹ Kissimmee had generated 1.5 million kilowatt-hours of electricity for its more than 800 customers in 1940, and that figure would more than double in 1941 with the addition of the new diesel generator.² Other Florida municipal utilities which purchased most of their power at wholesale from privately-owned utility neighbors had a more difficult time during the war, as generating equipment and copper for transmission and distribution systems remained in short supply throughout the war.

The immediate task that J.C. Buckels and the utility staff faced in 1941 was in supplying adequate power to the new U.S. Army Air Corps Training Field in Kissimmee.

The city of Kissimmee had acquired airport land west of town in the summer of 1941, along with a federal

21

Roy E. Hansel joins the crew at the power plant.

1980	1981	<i>1982</i>	1983	1984	1985	1986	1987	1988	1989	1990	1991	<i>1992</i>	1993	1994	1995	1996	19

government grant of \$233,000, to build a training base for U.S. Army Army Air Corps pilots. The city closed the airport to civilian traffic in early 1942, and the Army Air Corps took possession of the facilities in January 1943. During the next 2-1/2 years, as many as 2,000 pilots, pilot-trainees and support personnel were housed at the training base. In 1945, the first U.S. jet aircraft were secretly tested at the base.³

Kissimmee Light & Water had little problem in supplying the airfield off West Vine Street and all its facilities – control tower, maintenance shops, barracks and mess hall – with electric power. But there was little surplus to spare for load growth in the community.

Shortly after the new diesel generator was installed in the summer of 1940, the city had cut residential electric power rates. In conjunction with area electric appliance dealers, Kissimmee Light & Water promoted a summer-long sale of household electric appliances. By the time the sale ended in August 1940, the utility had added eight electric ranges, 23 electric refrigerators, 11 radios and four electric washing machines to its Kissimmee load.⁴

Customers who purchased new appliances in the summer of 1940 had to make do with them for the duration of the war. Early in 1942, the War Department began the conversion of factories from consumer durables like household appliances to the manufacture of airplanes, tanks, guns and military equipment. At Kissimmee Light & Water, employees pitched in to help win the war. In their spare time, they planted Victory Gardens, collected scrap for the war effort, rolled Red Cross bandages for the sons and daughters of Osceola County residents scattered on far-flung war fronts across the world, and worked with the personnel at the Kissimmee Army Air Field to sell war bonds to help finance the nation's military efforts.⁵

The collapse of Nazi Germany and Imperial Japan in 1945 was cause for celebration. But it was also the end of an era. The city's light and water department would enter the postwar world prepared to play a key role in the greatest economic boom in the history of Central Florida.

POSTWAR BOOM

The lifting of wartime restrictions on generating equipment in late 1945 came none too soon for Kissimmee Light & Water. Although the Kissimmee Army Air Field had wound down military operations by early 1945 and sold much of the facility back to the city of Kissimmee, load growth was predicted to be substantial in the immediate postwar era.

The intense military activity of the war years had exposed thousands of soldiers, sailors and airmen to the climate and economic opportunity of Florida. During the 10 years following the war, hundreds of former Kissimmee Army Air Field residents would move to Osceola and Orange counties. One who did was Robert L. Berlinsky. Originally from Brooklyn, New York, Berlinsky spent a year as an aerial engineer on a Douglas A-26 crew stationed at the Kissimmee Army Air Field. In 1955, Berlinsky returned to Kissimmee as director of the community's Chamber of Commerce. Later, he joined city government and served as electric utility director for a year in the late 1970s.⁶

"The ball field lights would come on, and that was the biggest load we had on the system."

With postwar modernization of the highways serving the area, including U.S. Highway 192 and the Orange Blossom Trail, Kissimmee became part of the decades-long expansion of the Florida tourist industry. It was during the postwar era that Kissimmee city officials began to notice a sharp increase in commercial load growth.

In 1946, the utility purchased and installed a second American Locomotive diesel engine, rated at 1,600-horsepower and driving a 1,130kilowatt generator. Load growth was so pronounced during the late 1940s that Kissimmee Light & Water completely upgraded its generating capacity just six years later, in 1952. Roy Hansel and the lakefront power plant crew installed twin Fairbanks Morse, 2,100-horsepower, 1,500-kilowatt diesel engine generator units and retired the old Fulton 500-kilowatt diesel generator unit.⁷

MONKEY BUSINESS

Ask any old-timer from Kissimmee Light & Water about memories of their working years, and the topic of the Kissimmee Zoo is sure to come up.

The city's zoo was adjacent to the lakefront power plant, and it was a popular tourist stop in the 1940s and 1950s. The zoo housed a lion, a honey bear, a monkey house and numerous reptiles and amphibians. In the wee hours of the morning, power plant workers on the midnight shift frequently were rattled by the wildlife.

"That bear like to scared me to death a couple of times," recalled Jimmy Daniels, a distant cousin of Roy Hansel who started to work in the power plant in December 1954. "When that lion roared, it sounded like he was right next to you."

Frank Hersey, who went to work at the power plant three years after Daniels, remembered that the midnight crew often had to deal with animals that had escaped their cages.

"The monkeys were all the time coming over to the power plant," Hersey laughed. "They'd get down in the trenches beneath the deck plates. One time, a chimpanzee got loose.

1998	1999	2000	2001	1901	<i>1902</i>	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	

Frank Hersey came to work in the power plant in 1957. Born in Maine, Hersey moved to the Kissimmee area with his mother in 1951. At the age of 22, he went to work as a mechanic in the lakefront power plant and immediately began training as an assistant diesel operator.

"In 1957, we were all diesel and bunker C," Hersey recalled. "You had to heat that stuff to 225 degrees for it to flow properly."⁸

At the time, Kissimmee Light & Water carried most of its load with the two Fairbanks Morse six-cylinder diesel engines installed in 1952. Several of the small diesels installed in 1923 were still in operation after more than 30 years.

"At night," Hersey said, "the load would get down so low we could carry it with those small diesels."⁹ The major industrial load on the system in the late 1950s was a packinghouse and a small plastic injection-molding plant. "We usually peaked at 7 p.m. during the summer," Hersey continued. "The ball field lights would come on, and that was the biggest load we had on the system."¹⁰

Each evening, the diesel operator in the plant had to turn on three street light circuits by hand. Hersey recalled that the street lights "didn't pull all that much juice. And there wasn't much difference in the load from day to day."¹¹ Kissimmee strengthened its ties with St. Cloud in 1953 when the two communities upgraded the capacity of the 1939 transmission line to 1500 kilowatts. St. Cloud had added two diesel generators totaling 1900 kilowatts in 1946 and 1948, making the 1953 improvements to the transmission line attractive. For the most part, the transmission line continued to serve as a method of shunting emergency power between the two communities. But by the late 1950s, the two utilities were experimenting with using the transmission line to simplify routine maintenance operations and to facilitate off-peak operations.¹²

PLANNING FOR THE FUTURE

In 1958, for the first time, Kissimmee retained the services of a consulting engineering firm to begin formal planning for what city officials knew would be continued rapid growth through the 1960s. Smith & Gillespie Engineers, Inc., would help Kissimmee Light & Water plan for what would become explosive growth by the early 1970s.

At the time, diesel and bunker C fuel remained plentiful and inexpensive. Smith & Gillespie recommended that the city continue its program of expanding diesel generation at the lakefront power plant.

In 1960, the utility installed engine-generator Unit No. 8. No. 8 was a monster, a 12-cylinder, 4,200-horsepower engine driving a 3,000-kilowatt generator.¹³ The new unit ushered in the upgrade of the city's distribution system from 2,400 volts to 4,160 volts. The next year, the city installed an 1,100-kilowatt, General Motors electromotive portable diesel engine that could provide emergency power anywhere on the utility's system.¹⁴

As load growth continued into the early 1960s, it became apparent to utility personnel in both Kissimmee and St. Cloud that the two communities would have to become more closely interconnected. "In 1963," Roy Hansel reported, "preliminary discussions between the two cities led to the development of engineering studies by the consulting engineers for the city of Kissimmee. The technical feasibility of interconnected operation was established."¹⁵

It would be slightly more than seven years before full interconnection between the two cities was finally achieved. And in those seven years, Kissimmee changed forever.



He grabbed a broom and started hitting everybody in sight."²

Jimmy Daniels recalled the night when a watchman at the nearby mill walked over to inform the power plant crew that "that monkey's loose again. And that monkey was up on our board pile throwing boards every which way."

Some of the power plant operators would tend a garden behind the plant to grow vegetables for the zoo animals.

And more than once during Frank Hersey's years at the plant, operators would catch alligators that wandered onto plant property from nearby Lake Toho.

"We caught two or three alligators over the years," Hersey said. "We'd just call John Bronson, the keeper at the zoo, to come get them."

 Oral History Interview with Jimmy Daniels, Campbell City, Florida, April 18, 2001
 Frank Hersey Interview
 Jimmy Daniels Interview
 Frank Hersey Interview

25

24

7 "Snow White and the Seven Dwarfs" debuts as the first full-length animated feature. A radio broadcast of "The War of the Worlds" causes mass panic.



Flood of 1956

1921

1920

Kissimmee in the late 1960s was still an agricultural community. The Kissimmee Light & Water Department served about 5,000 residential and commercial customers, as well as cattle ranches located on the outskirts of the community. The town had its population of snowbirds – Yankees who came down for the winter – but tourism was a far cry from what it is today.

Ed Carter started with the utility on a line crew in 1966. Back then, the utility had two line crews, a service crew and a tree-trimming crew which were dispatched out of a makeshift garage located at the back end of the lakefront power plant. The Light & Water Department owned one hydraulic bucket truck and several A-frame digger-derrick trucks.

"Highway 192 only went to U.S. 27, and it was a twolane, dirt road," Carter said. "When I started, they'd still be driving cattle down the middle of the street on West Vine. The John Young Parkway was a dirt, dead-end road, and from Carroll Street to Highway 192, it was all dirt road."¹

Robert Culpepper started on the line crew as a groundsman two years before Carter joined the crew. Culpepper recalled that utility work in the 1960s was hot, dirty and labor-intensive.

"We were still digging poles by hand," he said. "We used the old pike poles to put the utility poles in place. We used to pencil the poles. That meant we sharpened them by hand. And on some of them, we walked down into the hole with a firetruck."²

In the 1960s, line crews literally knew every customer on the system by name. "If you told us an address, we didn't know where it was," explained Bill Groover, who started on the line crew in 1963. "There was a better chance of us finding it if we knew your name."³

Since utility employees worked for the city, if the weather precluded line crews and the service crew working outside, then they were put to work on city projects. "If it was raining two or three days at a time,

27

1939 Kissi const

Kissimmee and St. Cloud agree to construct a "tie line" connecting the two communities.

1939 World War II begins.

1940 Kissimmee Light & Water has more than 800 customers.

1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 194

"All of a sudden one day, Kissimmee quit being a little town."

the light crews would go into the power plant and clean cobwebs," recalled Ken Lackey, who started with the utility as a groundsman in 1959.⁴

"You worked for the city of Kissimmee," agreed Jon Cole, who joined the utility in 1970. "We all picked up garbage at one time or another. We got cats out of trees. We'd change the traffic lights. We built docks and seawalls down on the lakefront. I once spent a whole week with a prisoner painting the city jail."⁵

Some of that workload changed in 1963 when the city created a separate Public Works Department to handle sewage and other community improvements traditionally handled by the Light & Water Department.

But if Kissimmee still retained very much a small-town flavor in the late 1960s, then the community and its municipal utility would be all but unrecognizable 10 years later. The growth that the city had begun to experience during the 1960s – Kissimmee doubled in population from 1960 to 1970 – would increase exponentially during the 1970s. "All of a sudden one day, Kissimmee quit being a little town," said Frank Hersey, who spent 35 years at the lakefront power plant before retiring in 1992.⁶

FULL-SCALE INTERCONNECTION

When describing the modern history of Osceola County and Central Florida, local people refer to "pre-Disney" and "post-Disney." The opening of the Disney World theme park in October 1971 would forever change the character of Kissimmee and Central Florida.

Roy Hansel retired as utility superintendent in 1972, just months after Disney World opened. As it was, Hansel and the Light & Water Department had struggled to keep up with growth in the late 1960s. It had become apparent to the utility planners that the diesels would be inadequate for coping with the fast-growing demand on the system, even after most of the diesels in the lakefront power plant were converted to dual-fuel natural gas operation in the late 1950s and early 1960s.

Smith & Gillespie, the utility's Jacksonville-based engineering consultant, had been recommending since 1967 that Kissimmee and St. Cloud interconnect their systems in parallel through a high-voltage, 69,000-volt transmission line.⁷ In 1966 and 1967, load growth outpaced capacity, and the Light & Water Department was forced to bring in additional diesel generators on rail cars to help meet the peak load.⁸ On July 14, 1970, Mayor J.C. Clemons and the Kissimmee City Commission signed an agreement with their counterparts in St. Cloud to interconnect the two cities with a 69,000-volt transmission line.⁹ The highvoltage line went into service almost one year to the day later.

With the 69,000-volt transmission line in place, Kissimmee Light & Water was quickly able to negotiate interconnection agreements with Florida Power Corporation. In the spring of 1972, Florida Power interconnected with Kissimmee and St. Cloud through its Lake Cecile Substation.¹⁰ For the first time in its history, the Kissimmee Light & Water Department would be able to purchase surplus wholesale power from a much larger investor-owned utility neighbor.

Between 1968 and his retirement in 1972, Hansel had supervised the purchase and installation of five Fairbanks Morse, 12-cylinder, opposed piston engines. The new high-capacity engines gave the utility 10,000 kilowatts of added capacity. But Jimmy Daniels can recall breathing a sigh of relief when the Florida Power connection went on line in the spring of 1972.

"Florida Power was like that big power plant in the sky," Daniels said. "Oh, yes, it was a relief."¹¹

THE DISNEY YEARS

Disney had begun buying land in northwestern Osceola and neighboring northwestern Orange counties in 1964.¹² Walt Disney had built an entertainment empire on Mickey Mouse and his cartoon characters, and in 1955 the Disney company had opened a theme park near Anaheim, California. Disneyland was an immediate hit, although Walt Disney knew early on that he had made a colossal mistake in only purchasing 68 acres

THE MERRY-GO-ROUND

The Light & Water Department's power supply woes in the 1970s were compounded by the utility's difficulty in finding and retaining a replacement for Roy Hansel.

After serving nearly 30 years as superintendent of the utility, Hansel stepped down to a much-deserved retirement in 1972. During the next 10 years, Kissimmee Light & Water would become somewhat of a revolving door for utility superintendents. Four people would hold the job during the decade-long period.

To be fair to Hansel's successors, the 1970s were tough years for utility managers, both in Florida and nationwide. Inflation, rapidly rising interest rates and energy shortages made managing an electric utility a difficult, if not frequently impossible, task.

Following Hansel's retirement, the city promoted E.C. "Bud" Somers to the post of utility director. Somers, a genial Canadian, was in the job for less than a year before accepting a similar position with the St. Cloud municipal utility.¹

The post remained vacant for a year, with Assistant City Manager Bob Berlinsky serving as acting director of the utility until James A. Bauer was hired for the position in June 1974. Bauer spent six years as util-

Kissimmee Light & Water purchases

Locomotive diesel engine.

1946

29

28

5 U.S. drops atomic bombs on Hiroshima and Nagasaki.

for the California theme park.13 Within six months of its opening, Disneyland was surrounded by commercial sprawl.

Walt Disney vowed not to let that happen the next time. At about the time of the 1964 New York World's Fair, Disney conceived the idea of a theme park and experimental future city he called EPCOT (Experimental Prototype Community of Tomorrow).¹⁴ Disney and his brother Roy - who handled the company's business affairs - soon settled on Central Florida as a likely site for the new theme park and EPCOT. The Disney brothers were attracted by the year-round warm climate, the distance from coastal hurricanes, and the availability of cheap land.

In 1964 and 1965, Disney agents quietly assembled more than 27,000 acres in Osceola and Orange counties at a purchase price of just over \$5 million.¹⁵ Kissimmee residents knew that something was going on, and speculation about the buyers ran rampant across Central Florida. One school of thought said it was South Americans buying up cattle land. Another popular theory was that Howard Hughes was putting together a huge estate. Still a third theory speculated that the U.S. government and NASA were building a huge air base for the proposed space shuttle.¹⁶

Speculation was put to rest in October 1965 when Florida Governor Haydon Burns announced that the purchaser was Disney, and that the state legislature would pass enabling legislation to help establish Disney's Magic Kingdom as the world's pre-eminent theme park.17

In the spring of 1967, Disney crews began transforming more than 40 square miles of Osceola and Orange counties. The Kissimmee Light & Water Department began to feel the pinch almost immediately.

The Light & Water Department did not serve the Disney project directly. Roy Disney had created the Reedy Creek Improvement District to provide the main source of electric power to the theme park itself.¹⁸ But Kissimmee Light & Water served many of the residential subdivisions that sprang up to house construction and theme park workers, as well as the commercial areas along Highway 192.

> "We stopped picking oranges and started picking tourists."

"The residential areas started growing east of town," recalled Bill Groover. "They were all being built for the Disney construction people. Buenaventura Lakes was the first big subdivision."19



Disney's monorail

Overnight, it seemed, construction exploded in Kissimmee and Osceola County. During its first eight years of operation, Disney World welcomed more than 100 million guests. "We stopped picking oranges and started picking tourists," said one Orlando-area banker.²⁰ All those tourists had to have someplace to stay and eat, and the Highway 192 corridor through Kissimmee soon became congested with new hotels, motels and restaurants. And all those new hotels, motels and restaurants required vast amounts of electric power.

For the Kissimmee Light & Water Department, the 1970s were difficult years. The utility had to cope with year-in and year-out double-digit growth, not to mention energy crises, construction interest rates pushing 20 percent, and runaway inflation. The lakefront plant clearly was nearing the end of its productive life, and the 69,000-volt interconnection with Florida Power was stretched to the maximum.

ity director before joining the staff of the Florida Municipal Power Agency (FMPA) as a systems planner and engineer late in 1980.²

The city hired its next utility director after a nationwide search. Jack Danforth came to Kissimmee from the Pacific Northwest, where he had worked closely with public utility districts in the state of Washington. Danforth arrived in Kissimmee in November 1980 and immediately began instituting electric conservation methods he had learned in the Pacific Northwest.³

Danforth's tenure. however. was short. The city's new utility director had difficulties selling his home in Washington state. Early in 1982, he announced he was resigning and returning to take a position with an electric cooperative located near Tacoma.⁴

Once again, the Kissimmee Light & Water Department embarked on a nationwide search for a utility director. After six months and spending more than \$3,000 in advertising costs in The Wall Street Journal and other national publications, the city hired Donald L. Hornak as director of the utility.⁵ Hornak, a consulting engineer in Raleigh, North Carolina. had worked for Florida Power Corporation and R.W. Beck, the public power consulting group, before starting his own consulting firm.

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1948 Gandhi is assassinated. Jimmy Daniels begins work at Kissimmee Light & Water.

Segregation is ruled illegal in the U.S.

The growth brought about by Disney World had been a sobering experience . . .

Bob Berlinsky became acting city manager in 1973, and he vividly recalled the perilous state of electric power reserve margins at the time, even with the Florida Power interconnection. "The load was just outstripped by demand," Berlinsky pointed out. "Many times in those days, I'd have to go down to the plant, and we'd have to shut a feeder off for half an hour. We'd have rolling blackouts, sometimes both morning and evening."21

Berlinsky noted the primitive communications in use back then. "I've actually made telephone calls to businesses out on 192 asking them to turn off their outside lighting," he said. "So people knew there would be blackouts."22

Slowly, Kissimmee Light & Water caught up with the surging demand. The city purchased a 5,000-kilowatt share of Florida Power's Crystal River Nuclear Power Station in 1978. The next year, Kissimmee Light & Water established its first modern energy control cen-

ter (ECC). The Marydia ECC allowed the utility to establish a major interconnection with the Orlando Utilities Commission in 1980. The Taft to Marydia line was energized at 270,000 volts and allowed Kissimmee Light & Water to boost the amount of surplus wholesale power it was purchasing from neighboring utilities.

The utility entered the 1980s still painfully short of capacity. A second purchase of nuclear power - 5,000 kilowatts from Florida Power's St. Lucie plant - was negotiated in 1982 through the newly formed Florida Municipal Power Agency. But the Kissimmee Light & Water Department still faced near crisis conditions in trying to meet continuing double-digit load growth.

The growth brought about by Disney World had been a sobering experience, and Kissimmee Light & Water still had a long way to go before it could proactively plan for the community's future. It was becoming obvious to a number of people in the community that the utility would have to be reorganized before it could fully realize its potential in an exploding marketplace.



Disney's Magie Kingdom

Hornak arrived in Kissimmee in late July 1982.6 Five weeks later, he was gone, a victim of health problems and a disagreement with City Manager O. Sam Ackley about the scope of the utility director's responsibilities.7

Hornak's departure left the 85-person department in turmoil for the fourth time in less than a decade. Fortunately, Kissimmee Light & Water had one of the best number two men in the business. Central Florida native Joe David stepped in to run the department when Hornak left. It was the fourth time since 1972 that David had taken operational control of the department on an interim basis.8

"A good number two man is hard to beat," a local newspaper editorialized in the summer of 1982. "That applies to Kissimmee deputy electric utilities director Joe David. Signs of strong management include a capable backup team. In Kissimmee's case the backup team plays first class ball."

1 KUA. "Electrical System Chronological Overview." p.3 2 Mike Thomas. "Ex-official to join utility panel despite threat." Orlando Sentinel, June 21, 1983 3 "Danforth leaves mark on City of Kissimmee Osceola County Gazette, January 28, 1982 4 David Karpook, "Danforth resigns post as utility director Orlando little Sentinel, January 26, 1982 5 Karpook, "Top candidates turn down utility director sala Orlando little Sentinel, June 25, 1982 6 Karpook, "City revises program to save energy," Orlando tle Sentinel, July 30, 1982 7 Karpook, "Kissimmee utility director fired after five weeks on the job," Orlando little Sentinel, September 8, 1982 8 Ken Haldin, "City is looking for new chief for department Kissimmee This Week, April 11, 1982 9 "Good work. Joe David." Kissimmee News & Gazette, Jul 22 1982



Utility Authority

The Kissimmee Light & Water Department finally was successful in its search for a permanent utility director in the fall of 1982 when it hired James C. Welsh. Then 34 years old, Welsh came to the Florida municipal utility from East Kentucky Power Cooperative in Winchester, Kentucky, where he had been a lead electrical engineer.¹ Although young in years, Welsh brought years of experience to the Kissimmee job. A graduate of the Moore School of Electrical Engineering at the University of Pennsylvania, he had gone to work for Philadelphia Electric Co. (PECO) after graduation and had finished his master's degree in systems engineering while at the Philadelphia utility.

35

3 The City of Kissimmee creates a separate Public Works Department to handle sewage and other community improvements.

issimmee

63 President John F. Kennedy is assassinated while he rides through the streets of Dallas. Robert Culpepper begins work as a groundsman on the line crew at Kissimmee Light & Water.

1904	1905	1906	1907	1908	1909	1910	1911	<i>1912</i>	1913	1914	1915	1916	1917	1918	1919	1920	19.

Welsh spent much of the 1970s working for PJM, the power pool serving the Mid-Atlantic states. He had worked for a short time in the Denver office of R.W. Beck – the nationwide consulting engineering firm – before being hired by Eastern Kentucky Power Cooperative in 1979.² At the Kentucky generation and transmission cooperative, he helped formulate a systems planning process.³

Welsh would preside over momentous changes at the Kissimmee utility during his first three years on the job. As utility director, Welsh would help give Kissimmee Light & Water much-needed management stability. Welsh would oversee the final construction of a new 50,000-kilowatt, natural-gas combined cycle steam plant that would finally allow the utility to begin catching up with the explosive growth of the previous decade.⁴ And Welsh would help steer the utility through the political shoals surrounding the transition of the utility from governance by a City Commission to its establishment as an independent utility authority.

FIRST THINGS FIRST

36

Welsh knew the day he joined Kissimmee Light & Water that his first and most important task would be to improve employee morale.

"The employees and the community were just traumatized by the revolving door of utility directors since Roy Hansel left," Welsh recalled of his first days on the job. "The city was in desperate need of utility leadership, so I came in and worked like crazy."⁵ On his second day at the Kissimmee Light & Water Department, Welsh called a general meeting of the 85 people who then worked for the utility. "Somebody told me that we never did that before," Welsh said. "I replied, 'Well, that's fine, but we're going to have a general meeting of employees.'"⁶

Welsh told the assembled employees that he expected to be in Kissimmee for the long term, and that, in fact, he intended to remain the department's director at least five years. After the meeting, George Hunter, a grizzled veteran of the line crew, sidled up to Welsh and told the new utility director in no uncertain terms that he'd likely still be working on the line crew long after Welsh was gone.

"George retired five years ago," Welsh said in 2001. "At his retirement party, he told me, 'Well, Welsh, looks like I was wrong.""⁷

COMBINED CYCLE

When Welsh joined the utility at year-end 1982, Kissimmee Light & Water was still coping with the double-digit load growth that had escalated when Disney World opened the decade before. The utility was still small. Peak load at the time was 87 megawatts. Kissimmee Light & Water met demand with a combination of dual-fuel generators at the by then renamed Roy Hansel Generating Station on the lakefront and wholesale power purchases from the Orlando Utilities Commission (OUC) and other Florida utilities.

"Things were never the same after the Mouse hit town."

There were only three substations on the entire system. Only one – serving the 230,000-volt interconnection with OUC at the Marydia ECC – could handle the bulk power transfers that Kissimmee relied upon to keep the system functioning. The utility's 87 employees served more than 18,000 customers.⁸

By 1982, explosive growth was a way of life for Kissimmee Light & Water. "Things were never the same after the Mouse hit town," Welsh said. And in 1982, the Disney growth had really just begun. Back then, we did transmission planning by line sag. We were in the process of transitioning from a small municipal utility to a mid-sized municipal utility."⁹

Since the mid-1960s, the Kissimmee Light & Water Department had averaged 12.5 percent annual load growth. "In essence," Welsh explained, "growth doubled every five to seven years. And it quadrupled every 10 to 12 years. That kind of growth was just a way of life for us."¹⁰

In 1982, Kissimmee Light & Water purchased just under 50 percent of its electric power needs from neighboring utilities.¹¹ City light and water commissioners were increasingly nervous about putting the utility's fate in the hands of neighboring utilities. They had decided the previous year to take two paths to energy independence.

ED BRINSON

Few people are as well-versed in Osceola County electric utility affairs as Ed Brinson.

The senior partner in the Kissimmee law firm of Brinson, Smith & Smith, P.A., Brinson has been handling legal issues for KUA and its predecessor for nearly 40 years. Born and raised in Kissimmee, Brinson served as Kissimmee city attorney – with the exception of one year – from 1962 to 1985. Since 1985, Brinson has been the attorney for the Kissimmee Utility Authority.¹

Brinson originally wanted to follow his father into the field of medicine. World War II interrupted Brinson's career path, and he spent the war flying AT-6, P-39 and P-40 fighter aircraft, a passion that he later maintained as an officer with the U.S. Air Force Reserve.²

Following the war, Brinson received his bachelor of arts degree from Rollins College in 1949. Three years later, he received a law degree from Emory University in Atlanta.³ He practiced law for a year in Orlando before returning to his hometown of Kissimmee to establish a private practice in 1954.⁴

1922	1923	1924	1925	1926	<i>1927</i>	1928	1929	1930	1931	<i>1932</i>	1933	1934	1935	1936	1937	1938	193

The first path, instituted by Jack Danforth during his brief tenure as director, involved an ambitious program of energy conservation. Like many utilities in Florida, Kissimmee Light & Water began offering customers rebates for purchasing energy efficient appliances and insulating homes and apartments.¹² By the mid-1980s, Kissimmee's energy conservation efforts were a model for many Florida municipal utilities.

The second road Kissimmee traveled in the early 1980s was one the utility had been down before. Only this time, Kissimmee Light & Water was abandoning the decades-old strategy of installing diesel engines and returning to the steam plant concept that had carried the load in Kissimmee through the first 20 years of the utility's existence.

In 1981, the City Commission approved construction of a 47,500-kilowatt combined cycle gas and steamfueled power plant adjacent to the Hansel Plant on the lakefront.¹³ When the \$22 million plant was in full operation, it would triple Kissimmee's electric generating capacity and reduce utility bills by cutting the amount of expensive wholesale power the city was forced to buy.¹⁴ The new steam plant burned increasingly plentiful natural gas in combined cycle generators that were among the most efficient utility power plants in existence in the early 1980s.

The new power plant didn't come on line until the Christmas holidays of 1983, about a year behind schedule. The delays cost the utility some \$2 million

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for power purchases, but once the combined cycle plant was up and running, the city began to realize cost savings of more than \$200,000 a month.¹⁵ More importantly, the new plant gave Kissimmee Light & Water a much needed reserve margin with which to meet load growth.

CHANGING UTILITY GOVERNANCE

When Jim Welsh joined Kissimmee Light & Water late in 1982, he recalled being sometimes frustrated by the bureaucracy and politics of city government.

Early in 1983, Welsh went to City Manager Sam Ackley to request the addition of a staff engineer. Staff told Welsh to ask for three engineers, "because the city council will cut two," Welsh noted. "I said, if I need one, I'll ask for one."¹⁶

In many ways, the utility was an afterthought when it came to city government. Welsh remembered that in his first days on the job, the utility occupied offices on the third floor of the old City Hall downtown. "I hired Ken Davis," Welsh said, "and his desk was located next to the city's printing press. I told Ken if he wanted an office, he was going to have to build one."¹⁷ Davis, who ran the utility's engineering operations, did get an office of his own when the Light & Water Department moved to more spacious quarters on the second floor of City Hall in 1984. The governance of the utility from 1901 to the early 1980s flowed from the City Commission to the City Manager to the electric utility director. By 1983, the utility had become somewhat of a political football in city government. The previous fall – just prior to Welsh's arrival – Kissimmee Light & Water had reported that it was facing a \$3.5 million deficit and needed a 20 percent rate increase to help pay for the new combined cycle plant.¹⁸

Jimmy Wells, a local engineer, was elected to the City Commission in the fall of 1982 on a platform of reforming or selling the electric utility. For much of the 1960s and 1970s, revenues from the city had been subsidizing the utility, and an outright sale of Kissimmee Light & Water was attractive to some in the community. Wells brought the matter to a vote in the spring of 1983. After failing to convince a majority of the commission to sell the utility, Wells supported a compromise position to study restructuring it.¹⁹

The commission appointed an eight-person Electric Utility Ad Hoc Advisory Committee.²⁰ The commission gave the committee a small budget and asked them to bring back recommendations within a year's time. Members of the committee included Jerry L. Rogers, William H. Muntzing, James A. Bauer, Robert S. Cody, Ken W. Duke, Richard L. Hord, Earl H. "Bud" Palmer, Elizabeth Powell and Thomas N. Tompkins.²¹

"The committee went off for a year and studied the issue," Welsh said. "They went to every electric utility in the area. They met diligently every other week."²²

Within months, the committee was leaning heavily toward establishing a separate utility authority and splitting the utility from city government control. It was an idea that had come up before.

During the years when Brinson served as a city attorney, he estimated that 50 percent of his time on the job concerned utility matters. After 1985, 20 percent of his practice was devoted to KUA affairs.⁵

One of the proudest episodes in Brinson's career was the work he did with the city charter committee in 1984 that led to the establishment of the Kissimmee Utility Authority on October 1, 1985.

"I helped develop that charter, along with Dick Hord, Bob Cody, Jerry Rogers and the other members of the charter committee," Brinson said. "And that charter has never been amended since 1985."

1 Brinson Interview 2 Dyana Herr and Sandy McCurdy, "He's Had His Day(s) In Court, KUA Powerline, n.d. 3 David White, "Attorney savors memories of

n.d. 3 David White, "Attorney savors memories of career victories," The Orlando Sentinel, August 28, 1988 4 "He's Had His Day(s) In Court" 5 Ibid. 6 Brinson Interview

39

Neil Armstrong becomes the first man on the moon.

9 500,000 people take part in the world's largest rock'n'roll concert, Woodstock.

O City Commissioners in Kissimmee and St. Cloud agree to interconnect the two cities with a 69.000-volt transmission line.

1941	1942	1943	1944	1945	1946	1947	194

On October 1, 1985, the Kissimmee Utility **Authority officially** came into existence.

"The Chamber of Commerce formed a committee in 1972-1973 to investigate whether the utility should be a separate entity," explained Ed Brinson, a longtime Kissimmee city attorney who had represented city government on the 1970s committee.23

Nothing ever came of that earlier effort, primarily because the chamber committee couldn't agree on the revenue split between the utility and the city. "The key to the whole thing was how to transfer funds to the city," Brinson explained.24

The Electric Utilities Advisory Ad Hoc Committee solved the fund transfer problem by proposing that the utility pay the city a fee of 6.24 mills per kilowatthour.²⁵ The committee also met with members of the Orlando Utilities Commission and put together a proposed charter for a local utility authority.

"The Florida Home Rule law meant we could form the authority without the legislature getting involved,"

Brinson noted. "The beauty of the whole thing is that it got the utility out of the political arena."26

City Manager Sam Ackley was opposed to the establishment of a utility authority, but Ackley's resignation late in 1983 paved the way for City Commission approval in February 1984 of the committee's report proposing creation of a separate utility authority. The commission quickly appointed most of the committee members to a new charter committee charged with drawing up a charter for the proposed utility authority.²⁷

The committee worked on writing a proposed charter for the utility authority throughout 1984. One key decision involved the makeup of the utility authority board. Committee members recommended creating a five-member board to serve staggered terms. Utility authority board members could serve a total of 13 years, and the mayor of Kissimmee would serve as a sixth member, although in an ad hoc, non-voting role.

The committee presented the proposed charter to the City Commission early in 1985. On February 19, 1985, the City Commission approved the proposed charter and scheduled a city election the next month to approve or disapprove the proposed charter.

"It was a very unusual set of circumstances," Welsh recalled. "The City Commission really had its plate full with all the growth. They expressed the need to divest themselves of control and power over the utility for the good of the community."28

Welsh and his staff spent most of February and March 1985 explaining the utility authority concept to citizens' groups. On March 28, 1985, the matter went before the voters, and the result was a resounding 2-1 approval of the charter of the Kissimmee Utility Authority (KUA).²⁹

The charter committee's final responsibility was to serve as a nominating committee for the first KUA board. To make for a smooth transition from city control, the two most senior members of the City Commission were appointed to that first board. "Those were one- and two-year terms, and then the City Commission members dropped off," Brinson explained. Brinson moved over as the first KUA attorney. Once the nominating committee fulfilled its duties, the charter provided for nominations for future members from the board with approval by the City Commission.

On October 1, 1985, the Kissimmee Utility Authority officially came into existence.³⁰ For the next decade-and-a-half, KUA would be at the forefront of electric utility growth unprecedented in the nation.



Broadway in the 1920s

YEAR MUNICIPAL ELECTRIC UTILITY **ESTABLISHED**

1890 - Starke
1895 - Jacksonville
1898 - Ocala
1900 - Williston
1901 - Kissimmee
1902 - Tallahassee
1903 - Bartow
1904 - Lakeland
1907 - Green Cove Springs
1908 - Jacksonville Beach
1910 - Newberry
1911 - Fort Pierce
1912 - Gainesville
1915 - Alachua
Chattahoochee
1916 - Homestead
Lake Worth
St. Cloud
1917 - Moore Haven
1919 - Vero Beach
1920 - Fort Meade
1921 - Bushnell
1922 - Mount Dora
New Smyrna Beach
1923 - Orlando
Quincy
1924 - Wauchula
1926 - Havana
Leesburg
1942 - Clewiston
1943 - Key West
Florida Municipal Electric Association
4

40

1971

1940

the facility is between \$500 and \$600 million.

Utility Superintendent Roy E. Hansel retires.

Bob Berlinsky becomes acting city manager of Kissimmee.



1 ears

KUA attorney Ed Brinson once observed that the formation of the authority in 1985 freed the Kissimmee utility to focus on the growth issues brought about by the opening of Disney World in 1971. KUA after 1985 was able to spend far more time on electric power aspects of local area growth than the City Commission, which also had to deal with growth issues concerning water, sewer, zoning and street improvements during the years it ran the electric utility.¹

If Kissimmee Light & Water had experienced unprecedented load growth during its last 15 years as a department of the city, then KUA actually saw that growth accelerate in intensity during its first 10 years of existence, fueled by theme park tourism and industrial development. What had been a small utility in 1970 had become a medium-sized utility by 1985. Ten years later, KUA was on the verge of becoming a large utility. Installation of the combined cycle generator at the Hansel Plant in 1983 had tripled KUA's capacity and temporarily forestalled concerns about capacity shortage. But with load growth averaging 12 to 15 percent through the mid-1980s, KUA's board and staff had to be vigilant about planning for the utility's future.

With the combined cycle additions, the community and the utility already had made the decision that KUA would not be dependent on outside wholesale power to carry the lion's share of the utility's future load growth. In 1987, KUA opted to enter into a joint venture with the publicly-owned Orlando Utilities Commission (OUC) to purchase a 20,000-kilowatt share of the Stanton coal-fired generating station.

19'

Arthur Ashe becomes the first black man to win Wimbledon.

Kissimmee Light & Water names the lakefront power plant the Roy Hansel Generating Station.

1976	1977	1978	1979	1980	1981	<i>1982</i>	1983	1984	1985	1986	1987	1988	1989	1990	1991	<i>1992</i>	1993

The idea of joint venture ownership of electric power generation was at least a decade old in 1987. As far back as 1978, the then Kissimmee Light & Water Department had purchased a 5,000-kilowatt share of Florida Power's Crystal River Nuclear Power Station. In 1982, the city had joined the Florida Municipal Power Agency (FMPA) in purchasing another 6,600kilowatt share of Florida Power & Light's St. Lucie Nuclear Generating Station for \$22.5 million.²

By the mid-1980s, nuclear power, which once had appeared to be a solution to the nation's energy woes, was beset with both image and financial problems. OUC had staked its energy future on coal, and in 1983, the Orlando utility began construction of the Curtis Stanton Energy Center just east of Orlando.³

The 425,000-kilowatt plant was truly a public power joint venture project. KUA's participation in the project totaled 20,000 kilowatts. FMPA's share of the project – 112,000 kilowatts – meant that the Kissimmee utility and the municipal power agency owned more than 31 percent of the coal-fired power plant. Stanton would make reliable, inexpensive electric power available to more than 500,000 Florida public power customers.⁴

To make the transfer of electric power from the new plant as seamless as possible, KUA crews built a second, 69,000-volt interconnection with OUC, from the Taft substation to Buenaventura Lakes. Two years later, in 1989, KUA further strengthened its relationship with OUC by entering into a joint-venture agreement to purchase a 10,000-kilowatt share of the Orlando utility's Indian River gas turbine plant.⁵

8 BROADWAY

The establishment of the Kissimmee Utility Authority in the fall of 1985 necessitated changes not only in how the utility was to be governed but in where it was to be located.

"We needed more office space within the city."

The authority board had two primary reasons for seeking a new headquarters location for the utility. First and foremost was space. For nearly a decade, the general offices of the utility had occupied approximately 6,000 square feet on the second floor of City Hall. KUA employees were so jammed in the cramped space that utility customer service representatives worked from temporary desks in the lobby of City Hall.⁶

In January 1986, the KUA board purchased the First National Bank of Kissimmee building on the corner of Ruby Street and Broadway in downtown Kissimmee for use as a KUA headquarters facility. Built in the 1920s and remodeled in 1964, the 19,000-square-foot building provided a downtown location, ample parking and a convenience for customers who still wanted to pay their bills in person.

KUA paid \$325,000 for the two-story building and immediately began a \$950,000 renovation of the structure. "We needed more office space within the city," KUA engineer Ken Davis explained to reporters. "We expect to keep growing."⁷

KUA manager Jim Welsh "almost fell out of his chair" when construction crews uncovered the steel door to the bank's vault and determined that it was more than 100 years old.⁸ During the years the utility occupied the building, KUA proudly displayed the century-old vault door to its customers and guests.

What would become known as 8 Broadway, for the street address of the facility, was officially dedicated on April 8, 1988.⁹ At the same time that the utility was moving into 8 Broadway, KUA was working aggressively to solve its space problems for line crews and material management staff.

Since the late 1970s, the utility had housed line trucks and material at the city warehouse facility on Alaska Avenue at the west end of Mabbette Street. In the early 1980s, Kissimmee Light & Water embarked on a project to upgrade its fleet of line trucks. Expensive hydraulic bucket trucks often were parked outside, subject to the elements, and line crews frequently had to report to work at locations miles from a work site.

In 1988, the utility purchased land for a new KUA operations center at 2850 Bermuda Avenue. Construction crews immediately began clearing the site and erecting a steel and glass structure that would house the 50

A SLIGHT DELAY

Murphy's law dictates that if something can go wrong on a project, it probably will.

Murphy's law was working overtime early in the afternoon of Tuesday, November 30, 1993. Amtrak's Tampa-to-New York Silver Meteor had left Tampa shortly before noon and had briefly stopped in Lakeland before continuing on to Kissimmee. It was carrying 88 passengers and a crew of 10.

Meanwhile, an 82-ton General Electric turbine had left the Port of Tampa early in the morning of November 30 aboard a Rountree Transport and Rigging, Inc., heavylift truck, bound for KUA's Cane Island Power Park.

The truck was nearing the end of its 13-hour journey when it was hit broadside by the Silver Meteor at a road crossing near Intercession City.

Wreckage was strewn for half-amile up and down the railroad tracks. The locomotive, baggage car and three passenger cars derailed. The gas turbine lay on its side, tossed from the bed of the heavy-lift trailer like a giant, green wrapped birthday present box.

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1977 The movie "Star Wars" is released.

The City of Kissimmee purchases a 5,000kW share of Florida Power's Crystal River Nuclear Power Station. 9 Kissimmee Light & Water establishes its first modern energy control center (ECC) 79 Roy E. Hansel dies.

4 1995 1996 1997 1998 1999 2000 2001 1901 1902 1903 1904 1905 1906

1909

employees of the distribution and materials management departments.

The new building also included offices for management and staff, a training room, a two-stall vehicle repair facility, inside and outside storage areas, and covered parking for the utility's growing fleet of line vehicles. On Tuesday, December 5, 1989, Bermuda Avenue hosted a formal open house for the community.¹⁰

CARROLL STREET

The continuing growth of the utility and its personnel throughout the late 1980s presented a never-ending challenge to the KUA board. Faced with dramatic growth in its customer relations and information systems departments, the utility in early 1990s made the decision to begin planning for two major expansion projects.

KUA would establish itself as one of the most "wired" electric utilities in North America. One project involved the complete upgrade and replacement of KUA's Supervisory Control and Data Acquisition (SCADA) system.¹¹ The increasing computerization of utility operations in the late 1980s and early 1990s allowed utilities such as KUA to more accurately monitor generation and distribution performance than ever before. KUA's new state-of-the-art SCADA system replaced a previous control system installed at the Marydia Substation and ECC in the late 1970s.¹²

The second major expansion project of the early 1990s involved finding a location for the new SCADA system. It had become readily apparent to KUA directors within just a few years that the 19,000 square feet of space at 8 Broadway was inadequate to house the utility's growing staff. By early 1990, numerous personnel working in KUA's finance and support services areas were located in leased office space throughout Kissimmee.

KUA began drawing up plans for a new facility that would house the utility's administrative, engineering and energy control personnel. Late in 1990, KUA closed on the purchase of a 36-acre property adjacent to the utility's Bermuda Avenue distribution and warehouse facility. Construction of the 63,000-square-foot facility at 1701 W. Carroll Street began on July 8, 1991.¹³

In a move that would pay big dividends less than a year later, engineering, information systems and distribution personnel immediately started a year-long process of designing and installing miles of fiber optic links between the new building and 8 Broadway.¹⁴ Glass fiber cable could carry up to 100 times the voice and data communications carried by copper wire. In the years to come, KUA would establish itself as one of the most "wired" electric utilities in North America.

The construction at Carroll Street took on a special urgency just before midnight on October 2, 1991. Employees arriving for work the next morning were greeted by fire hoses snaking through the 8 Broadway building, customer relations employees Lynn Boyd and Gloria Fisher directing traffic on Broadway, and nearly three dozen firefighters on the scene.¹⁵

A fast-moving fire had started the night before at Brown's Café, two doors down from the KUA offices. The fire destroyed Brown's Café and the Haselden Chiropractic office and caused extensive smoke damage to the KUA offices. Utility director Jim Welsh was awakened by a phone call



Groundbreaking for the Carroll Street facility

Fortunately, there was no loss of life, and only several passengers required hospitalization. The gas turbine was a total loss, but since it had not yet reached the Cane Island Power Park, the \$10.5 million loss was not borne by KUA.¹

The accident did cause a delay in the start-up of Cane Island. Originally scheduled to begin service in May 1994, Cane Island Unit 1 did not begin full power operations until late in the summer of 1994.²

1 Chris M. Gent, "Gas Turbine Bound for Cane Island Hit by Amtrak Passenger Train," KUA Power Line, January 1994, p.1 2 Photograph, Kissimmee Utility Authority, 1994 Annual Report, p.4

James C. Welsh becomes utility director

for Kissimmee Light & Water.

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81 A new plague is identified as AIDS.

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1	91		

from the Kissimmee Fire Department shortly after 5 a.m. on October 3. He was immediately on the phone to Pauline Fitzgerald, his administrative assistant, suggesting she wear jeans and tennis shoes for the rest of the week.16

Construction on the Carroll Street facility continued through 1991 and 1992. Administrative, engineering and information systems personnel began moving into the new building shortly after the July Fourth holiday in 1992.

The utility embarked on a major expansion of the facility in 1995.17 By that time, KUA had decided to concentrate all of its staff personnel, including customer service representatives, at the Carroll Street facility. Early in 1995, KUA sold the 8 Broadway facility to the city of Kissimmee for \$1 million.¹⁸ Customer service representatives working at the downtown building began the process of transferring to the first floor of the renovated Carroll Street offices during the summer of 1996.19

CANE ISLAND

KUA's aggressive moves to add joint venture power capacity during the late 1980s positioned the utility to better meet surging electric power demand in Kissimmee. But Welsh and the utility's planning and engineering staffs knew that growth in demand projections for the 1990s dictated that KUA continue adding capacity.

When KUA was formed in 1985, the peak demand on the utility's system had been 121,000 kilowatts. Five years later, following the coldest winter in Florida in a generation, the peak demand on the utility's system had reached 200,000 kilowatts, a 15-percent average annual increase.²⁰ KUA's growth rate through the late 1980s dwarfed that of the national utility average of three percent a year for the same period of time.

Even more eye-opening were the projected growth figures for the 1990s. In a report prepared in the summer of 1990, KUA's planning department estimated that peak demand would reach 300,000 kilowatts by the year 2000 and pass through the 400,000-kilowatt plateau by the year 2006.21 KUA clearly needed to continue adding generation capacity to meet the future demand growth.

Since its inception, KUA had shown a willingness to enter into joint venture agreements with neighboring Florida municipal utilities to add capacity. In 1991, KUA and FMPA were in the midst of negotiations to purchase a 25-percent partnership in the second unit at OUC's Stanton coal-fired generating station.²² Also in 1991, the utility board set about planning another joint venture, but this time with a difference. Always before, KUA had bought participation in projects that other utilities were developing. This time, KUA took the lead on developing its own joint venture project.

In 1991, the board charged KUA staff with planning a combined cycle natural gas generating facility to be jointly-owned with the Florida Municipal Power Agency. KUA planners selected a 1.027-acre site at Cane Island. located about nine miles southwest of Kissimmee.

Negotiations continued with FMPA throughout 1991. On February 28, 1992, the KUA board and FMPA representatives approved a Framework of Joint Participation Agreement to build and install a 40,000-kilowatt General Electric gas turbine generator at Cane Island.²³ The terms of agreement also called for the construction of a second, 120,000-kilowatt gas turbine generator at the site. KUA and FMPA would each own a 50percent share of the project.²⁴

Cane Island Power Park marked a giant step forward for the Kissimmee Utility Authority. The decision to build the joint venture project near Intercession City would mark the utility's approach to growth through the remainder of the 1990s.



Aerial photo of Game Island Power Park

UTILITY RANKING BASED ON NUMBER OF ELECTRIC CUSTOMERS

1	Jacksonville - 367,702
2	Orlando - 168,400
3	Lakeland - 111,000
4	Tallahassee - 97,200
5	Gainesville - 80,549
6	Kissimmee - 47,238
7	Ocala - 46,638
8	Jacksonville Beach - 31,500
9	Vero Beach - 31,128
10	Key West - 28,539
11	Lake Worth - 25,465
12	Fort Pierce - 24,961
13	New Smyrna Beach - 21,330
14	St. Cloud - 19,055
15	Leesburg - 18,374
16	Homestead - 16,700
17	Bartow - 9,781
18	Mount Dora - 6,000
19	Quincy - 4,500
20	Clewiston - 4,069
21	Green Cove Springs - 3,150
22	Alachua - 2,872
23	Starke - 2,600
24	Fort Meade - 2,500
25	Wauchula - 2,419
26	Chattahoochee - 1,294
27	Havana - 1,276
28	Williston - 1,269
29	Newberry - 1,055
30	Bushnell - 1,045
31	Moore Haven - 963
Flor	ida Municipal Electric Association

48

The Vietnam War Memorial opens in Washington, D.C.

ower at its

The early 1990s were busy years for the Kissimmee Utility Authority.

KUA staff and Black and Veatch consultants worked for much of 1992 specifying and engineering the equipment to be installed at the Cane Island Power Park. In 1993, KUA acquired necessary permits, and construction got underway in earnest. KUA and FMPA decided early that year to go ahead with Cane Island Unit 2 construction in near tandem with Unit 1 construction. Actual power plant construction was only one part of the project. Crews extended a 20-inch gas main 6.5 miles from the Florida Gas Transmission pipeline to the Cane Island site. Other crews extended a 230,000volt transmission line from Cane Island to KUA's existing system via a new substation at Clay Street.¹ Still other crews built two 230,000-volt loop transmission lines to tie into OUC's Taft-McIntosh high-voltage transmission line north of Kissimmee.²

KUA purchases the First National Bank of Kissimmee in downtown Kissimmee for use as a headquarters facility.

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America's worst space tragedy occurs when the space shuttle "Challenger" explodes after takeoff, killing all seven astronauts aboard.

Osceola County celebrates 100 years

1937	1938	1939	1940	1941	<i>1942</i>	1943	1944	1945	1946	1947	1948	1949	1950	1951	<i>1952</i>	1953	1954

The gas turbine generator for Unit 1 and the combustion turbine generator for Unit 2 arrived at Cane Island by truck and rail in May 1994. Almost exactly one year later, KUA officially dedicated the Cane Island Power Park with a series of dedication ceremonies on May 11 through 13, 1995.³ KUA employees were treated to an all-you-can-eat barbecue at the site on May 11, and the utility played host to invited dignitaries and guests on May 12. Saturday, May 13, was set aside for tours by the general public. All told, more than 2,000 people toured the facility during the threeday open house.⁴

KUA celebrated its 10th anniversary in 1995 confident that the initiatives it had undertaken during the first decade of its existence would ensure energy independence for Kissimmee for years to come.⁵ Between 1991 and 1995, the utility had added nearly 80,000 kilowatts of joint venture capacity. For the first time in years, KUA had reserve capacity to spare.

SAVE

America's electric utilities discovered in the wake of the energy crises of the 1970s that they could defer building generating capacity through the simple expediency of providing incentives for customers to conserve electric power.

In late October 1991, KUA announced its Shifting Adds Value to Energy (SAVE) program. Ray Brennick, project manager for KUA's load management program, noted that "load management is a bold, innovative plan adopted by KUA and our community to help reduce energy costs for our customers and to keep the utility running more efficiently – now and in the future."⁶

"Implementation of the SAVE program was certainly one of the most intensive team-oriented projects ever undertaken by KUA. "

The SAVE program was designed to ease the demand of electricity on peak demand days, particularly in the winter heating and summer cooling seasons. SAVE allowed KUA to shave peak demand by slightly lowering the electric consumption of participating customers' household water heaters and air conditioning or heating units for a short period of time.

Brennick explained that KUA and its customers benefited from the program in three ways. KUA would avoid scheduling very high-cost peak generation units during the hottest and coldest days of the year. The utility would postpone the necessity for new generating capacity for a year or more in the future. And KUA would improve its quality of service to all customers by allowing the utility to automatically control certain electric devices.⁷

Existing customers who volunteered for the program received an incentive to participate in the form of a credit on their electric bill each month. The utility picked up the cost of special wiring and the installation of load management equipment on customers' air conditioners, heaters or water heaters. Customers received the bill credit whether the program was activated that month or not.

KUA also made the installation of load management equipment mandatory for all new residential units beginning service with the utility after December 31, 1991.⁸

KUA used a radio control system to send a radio signal capable of shutting off participants' appliances for a short period of time during peak demand times.

"During cycling," Brennick explained, "the customer will hardly feel it. The change in temperature inside a home during the cycling should be no more than a few degrees. In addition, customers will still have hot water."⁹ Brennick added that it takes a hot water heater under an hour a day to heat a day's supply of water. "Participating in the SAVE program will not mean compromising comfort,"¹⁰ Brennick concluded.

THE 1998 TORNADO

Located well inland from either of Florida's coasts, Kissimmee rarely experiences the fury of the Sunshine State's legendary hurricanes. Only twice in the past 50 years has Osceola County been in the direct path of a named hurricane.

But Central Florida comprises one of the most active tornado belts in the continental United States. Tornadoes can occur any month of the year, but are most common in spring. The whirling winds of a funnel cloud have been clocked at more than 250 m.p.h., and the devastation of an F4 or F5 tornado is unmatched by any other weather phenomenon, hurricanes included.

The outbreak of unusually strong tornadoes in east Central Florida during the late night and early morning hours of February 22 and 23, 1998 was the most deadly such tornado attack in Florida's history. Before the five-hour tornado attack was over, 42 people had been killed and more than 260 were injured. Total damages were estimated in the \$100 million range, while 700 buildings were destroyed. Another 3,000 structures were damaged extensively.

National Oceanic and Atmospheric Administration (NOAA) weather forecasters had been watching the storm develop for the better part of two days. By the late afternoon of Sunday, February 22, the atmosphere over the central part of the state was ripe for the outbreak of severe weather.¹ A stronger than normal sub-tropical jet stream with winds of 140 m.p.h. was approaching the Florida peninsula from the west, where a cold front draped itself southeastward across the Gulf of Mexico. South and east of the front, warm Gulf air laden with moisture rushed northward. The moist, unstable air was carried aloft by a strong low-level jet stream, and when it collided with the colder air to the west, severe weather was inevitable.²

52

88 KUA purchases land for a new operations center at 2850 Bermuda Avenue.

9 Disney-MGM Studios opens.

1989 Berlin Wall falls.

1955	1956	1957	1958	1959	1960	1961	<i>1962</i>	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972

Ken Davis, KUA's director of engineering, credited the utility's teamwork with the successful launch of the SAVE program. "Implementation of the SAVE program was certainly one of the most intensive team-oriented projects ever undertaken by KUA," Davis said in late 1993. "After months of hard work by the entire team, the system was installed and the first control of customers' equipment was performed in March 1993."¹¹

The SAVE program was put to an almost immediate test. In late March 1993, freezing temperatures, high winds and torrential rains lashed Osceola County and Central Florida. The storm was an outright blizzard further north in Georgia and the Carolinas, and many



Jim Welsh earries Olympic flame through Central Florida in 1996

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991 KUA introduces its Good Neighbor Energy Fund program. Florida utilities reported more extensive service outages than those experienced by KUA. But for the Kissimmee utility, the more important outcome of the storm was proof that the SAVE program worked.

KUA estimated that it was able to save approximately 2,000 kilowatts between 8 p.m. and 10 p.m. on the Monday evening following the weekend storm by controlling hot water heaters and household heating units of the 1,200 participants in the program. "Estimated reduction of demand to the utility during that period was approximately two megawatts," said Jim Welsh, KUA president and general manager. "This capacity in megawatts is comparable to having to run one of KUA's diesel units, a more expensive but possibly necessary thing to do without the SAVE program in place."¹²

By March 1994, KUA had more than 5,400 customers enrolled in the SAVE program, divided evenly between new hook-ups and voluntary participants. Welsh estimated that the utility had the capability of shaving more than 6,000 kilowatts of generation during peak periods because of the program.¹³

COMMUNITY SERVICE

One morning in February 1995, Jim Welsh took a telephone call in his Kissimmee office. On the other end of the telephone was a senior staffer from the American Public Power Association (APPA), the prestigious, Washington, D.C.-based trade association representing more than 2,000 municipal utilities in the United States. The staffer informed Welsh that KUA had just been named the recipient of APPA's 1995 Community Service Award.¹⁴

"This award recognizes your outstanding achievement in addressing the needs of your community through employee involvement," APPA President Royce Lyles wrote Welsh later that week in officially announcing the award.¹⁵

For observers of the electric utility scene in Florida, the award to KUA should have come as no surprise. Since its inception in 1985, Welsh and the KUA board had been encouraging utility and employee involvement to address needs in Kissimmee and improve the community's social, cultural, educational and economic environment.

For years, KUA employees had been a mainstay of the Heart of Florida United Way, serving residents of Osceola, Orange and Seminole counties.¹⁶ Through the mid-1990s, KUA employees consistently contributed more than \$7,000 each year to the Heart of Florida United Way.¹⁷

But utilities are expected to participate in United Way fund drives, and United Way participation was, in reality, a minuscule part of KUA's involvement in the community. In the end, APPA perhaps was most impressed with the utility's involvement in the educational life of Kissimmee. The first thunderstorms began firing over the Gulf Coast late that Sunday afternoon. By evening, three supercell storms had begun to move inland from west to east. Just minutes before 10 p.m., the first tornado touched down in Volusia County, near the junction of I-95 and I-4. The tornado damaged numerous mobile homes in the vicinity and blew four tractor-trailers off the interstate. Amazingly, only one person was killed.³

Just over 30 minutes later, three people died when as many as three tornadoes hit a retirement home community in Winter Garden just west of Orlando⁴ At 10 minutes past midnight, a series of tornadoes raced across the Orlando metropolitan area in an arc from Altamonte Springs to Sanford. The tornadoes destroyed numerous homes, mobile homes and recreational vehicles, taking 13 lives in the process.⁵

Kissimmee's turn came just before 1 a.m. that Monday. The tornadoes carved a path of destruction from Campbell City to Boggy Creek Road. Twenty-five permanent and winter residents of the community were killed when a tornado destroyed homes, businesses, mobile home parks and recreational vehicle parks. When the tornado touched down in the Flamingo Lakes subdivision, every one of the 163 homes was damaged to some extent; about half of the homes were destroyed outright.⁶ Weather observers counted seven separate tornadoes that touched down in Kissimmee and surrounding Osceola County that early Monday morning.⁷

The tornado outbreak in Osceola County was replete with a story of Kissimmee's miracle baby. Jonathon Waldick, 18 months old, was asleep in his room when a tornado lifted him from his crib. Jonathon's distraught family thought he was surely dead. After 30 minutes of frantic searching, they found him wedged into the branches of a tree, wrapped in his blanket and buried in a pile of branches and sheetrock. Jonathon was alive and barely scratched.⁸ In the Flamingo Lakes subdivision, a twister

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Employees move into the new Carroll Street facility adjacent to the Bermuda Avenue complex. 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 19

In 1991, KUA began partnering with the Osceola County School System in a mentor program. At the time, Florida ranked 45th out of 50 states for its percentage of students receiving high school diplomas.¹⁸ Volunteers from the utility worked one-on-one with high-risk students – those identified as most likely to drop out of school. KUA allowed all employee participants in the mentor program time off from work to mentor individual students.¹⁹

That first year, a total of nine KUA employees – including Jim Welsh – served as Osceola County School System mentors. Welsh and the staff treasured a letter from Shane Litton, a 12th grader at Osceola High School, to his mentor, Karen Shelton of customer service. "She has shown me and led me down a new and improved path," Litton wrote in 1992. "At the end of this path awaits an Osceola High School diploma for me. She is a true friend."²⁰

KUA's work with the Mentor Program earned it recognition as one of the school district's Outstanding Business Partners in 1992.²¹ The utility didn't stop its education initiatives with the Mentor Program, however.

In 1993, KUA donated use of undeveloped property immediately adjacent to the Carroll Street headquarters to the city of Kissimmee for improvement as a youth soccer field. The city's parks and recreation department took responsibility for developing and managing the soccer fields, and Mayor John Pollet

"This is the community's utility."

saluted the utility for its vision and support of youth athletic programs. "I think it's a great move on KUA's part, showing innovative thinking," Pollet said in accepting the donation of the property use.²²

In 1994, KUA exhibited more innovative thinking when it created Energy Exchange, a quarterly newsletter devoted to energy information for area educators and mailed at no cost to more then 1,000 elementary, middle and high school science teachers in Osceola County.²³ At about the same time, KUA began making \$500 mini-grants to local teachers for the implementation of electricity-related science projects.²⁴

In 1995, KUA began providing financial support to the Osceola County Regional Science Fair for 7th and 8th graders. Staff from the utility's engineering department served as judges for the annual affair.²⁵

KUA and its employees contributed thousands of dollars and thousands of hours of volunteer time to dozens of Osceola County community outreach programs. The recipients included the semi-annual blood drive sponsored by the Central Florida Blood Bank, the Junior Achievement Bowl-A-Thon, the March of Dimes WalkAmerica, the Salvation Army Bell Ringing program, the Share Your Christmas Food Drive, and the United Way campaign.²⁶

KUA was very sensitive about its responsibilities to the less fortunate in the community. The utility introduced its Good Neighbor Energy Fund program in 1991 to help KUA customers experiencing financial difficulty pay their utility bills. In just four years, more than 700 KUA employees and customers raised \$27,000 to help needy customers pay their bills in emergency situations. In 1995, KUA's board of directors voted to match dollar-for-dollar contributions to the Good Neighbor program.²⁷



ripped the roof off a house. The homeowner found his eightyear-old son in his bedroom, sound asleep as if nothing had happened.⁹

The Storm Let Up. We Never Did.

For KUA and its crews, the tornado outbreak was a time to test its disaster relief planning. The tornadoes wreaked havoc on the utility's transmission and distribution system. The estimated 260 m.p.h. winds sheared a 115-foot concrete transmission tower at its base and left other wooden transmission poles in the vicinity so splintered they were not much more than matchwood. More than two miles of distribution poles were shattered near the Florida Turnpike. That Monday morning, more than 11,000 Kissimmee residents were without electric power.¹⁰ Damage to the electric system totaled more than \$1 million.¹¹

By 3 a.m. that Monday, KUA had activated its storm disaster plan. Crews were dispatched to begin restoring power to priority customers, as off-duty crews began arriving to help. The utility's primary area of concern before dawn that Monday was public safety, with miles of downed poles and live electric lines across the city. By dawn, radio commercials were running continuously on Kissimmee stations, in both English and Spanish. Similar ads began appearing in the late morning newspapers serving the devastated area.¹²

At first light, KUA employees were dispatched to the affected areas to warn residents personally about the danger of downed power lines. More than 1,200 residents showed up at a KUA-sponsored community meeting late that morning to hear direct reports on the restoration efforts. Since the American Red Cross had yet to mobilize its emergency feeding efforts in the area, the utility contracted with a local barbecue restaurant to deliver 1,500 hot meals to the community meeting.¹³ Because of its communications efforts, not one person in Kissimmee was electrocuted or injured in the utility's week-long restoration after the storm.¹⁴

> KUA board votes to match dollar-fordollar contributions to the Good

Neighbor Energy Fund.

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Ground breaks for the Cane Island Power Park, a joint venture for KUA and Florida Municipal Power Agency (FMPA). The World Trade Center is bombed.

94 O.J. Simpson is arrested on charges of double murder.

1904

In 1994, KUA initiated its Project Santa to brighten the holidays for the county's needy children. Organized by Robin Helquist of customer service, the project solicited donations of cash and gifts which were distributed to children in Intercession City near the Cane Island Power Park.²⁸

KUA's commitment to the community it serves was recognized by APPA, but to Jim Welsh, that commitment was simply par for the course. "This is the community's utility," Welsh said. "It's locally owned and controlled, and that's the strength of the utility. That also implies a compact with the community."29

INCREASING PROFESSIONALISM

One of the achievements in which Jim Welsh takes most pride is the increasing professionalism of the KUA staff. When Welsh joined the then Kissimmee Light & Water Department in 1983, he was the only college graduate on the utility's staff of 87 people.

Today, KUA has 289 employees on staff, and all are high school graduates. KUA employs 42 college graduates; 10 of KUA's employees hold master's degrees.³⁰ Another 31 employees have attended college. The utility offers a full tuition reimbursement program to employees who want to go to college.

A measure of the high standards that KUA has established for its work force came in 2000 when the utility filled an opening for an information technology

"That's how you build the reputation of a good work force."

department head. KUA advertised extensively in industry publications and received 550 resumes. KUA sent a four-page application to each person who sent in a resume and whittled the number of applicants to 350 people. The human resources department pared that list down to 254 people, and Welsh and the department heads reviewed all 254 qualified applicants.

"We got it down to the top 30 applicants," Welsh explained. "We sent each of them a questionnaire and a set of problem-solving exercises. We got 25 responses back. We personally interviewed 16 applicants and selected our top candidates. It was a good fit for us."³¹

For Welsh and KUA, the focus on professionalism is driven by necessity. The increasingly complex electric utility industry dictates critical thinking and a creative approach to problems that didn't exist in the industry a generation ago.

"We want to be known as a great employer," Welsh explained. "And we want the cream of the crop. That's how you build the reputation of a good work force."32



Seenes from Osecola County



Restoration of the damaged transmission and distribution system took six days. By the Wednesday after the storm, the day that President Clinton and Florida Governor Lawton Chiles toured Osceola County, only about 150 customers were still without power.¹⁵

"A week later, we had it all back on," said Line Foreman Robert Culpepper: "We did it all ourselves. I think we had one Orlando Utilities Commission crew working with US. "16

KUA's comprehensive disaster response to the February tornadoes was one more example of the utility's commitment to its community. "In the wake of all this destruction," the Kissimmee City Commission noted the week after the storm, "the level of support received by the city of Kissimmee from KUA was tremendous."17

Jim Welsh, president and general manager of KUA, said the tornado was a watershed event for the utility and the community. "I think the tornado convinced people that we meant what we said when we pledged to provide Kissimmee with the highest level of reliability."18

1 NOAA, Event Summary, February 22-23, 1998, p.1 2 Ibid., p.1 3 U.S. Killer Tornadoes of 1998, http://www.tornadoproject.com/past/pastts98.htm 4 Ibid. 5 Ibid 6 Ibid. 7 Deadly 1998 Spring Tornado Rampage Remembered," FEMA Region IV Newslette http://www.fema.gov/reg-iv/1999/r4_01.htm 8 Christopher John Farley, "Twisters, Tragedies and Miracles," Time, March 9, 1998, v.151, no.9 9 Ibid. 10 KUA, "The Storm Let Up. We Never Did." 1998 Annual Re 11 Ibid., pp.7-8 12 Ibid., pp.10-11 13 Ibid., pp.11-13 14 Ibid., p.15 15 "Clinton in Florida to view storm damage," CNN Interactive, February 25, 1998, http://www.cnn.com/WEATHER/9802/25/florida.cleanup/index.html 16 Oral History Interview, Robert Culpepper, Kissimmee, Florida, February 26, 2001 17 KUA. "The Storm Let Up. We Never Did." 1998 Annual Report, p.15 18 Oral History Interview, James C. Welsh, Kissimmee, Florida, February 26, 2001

KUA.net is launched.

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The Murrah Federal Building in downtown Oklahoma City is bombed.

The Unabomber is arrested.

Princess Diana dies in a car crash



Gears

Walk into the lobby of KUA's Carroll Street customer service facility on any weekday morning and you're likely to see Kissimmee residents busily checking email and surfing the Internet.

The computer kiosks in the KUA lobby are an apt symbol of the utility's commitment to meeting the challenges of the 21st century, in much the same way that Kissimmee Light & Water staffers met the tests of the 20th century.

KUA showed amazing foresight in the early 1990s when it began laying fiber optic cable from Carroll Street across Osceola County. Today, the utility is a leader in Central Florida broadband communications, offering high-speed Internet services to an estimated 7,500 customers. KUA.net is a model for other municipal utilities considering entry into the competitive world of Internet communications.

Today, 100 years after it began service with a small lakefront steam plant, KUA and its more than 280 employees operate Florida's seventh-largest municipal utility, serving 53,000 customers along nearly 700 miles of distribution line and 58 miles of a high-voltage transmission grid.¹

Growth, which had averaged 12 percent a year from the late 1960s to the early 1990s, recently has tailed off to a still respectable 6 percent a year. KUA crews average 1,900 new hookups a month to serve many of the more than 60,000 Disney employees who live in Kissimmee and surrounding Osceola County.

9 A killing spree takes place at Columbine High School in Colorado.

<i>1927 1928 1929 1930 1931 1932 1933 1934 1935</i>	1936	1937	1938	1939
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As it enters into its second century of operation, KUA is continuing to meet the challenges of serving the electric power needs of its growing area of Central Florida. By late fall 2001, the utility will have installed a third generator at Cane Island Power Park just southwest of Kissimmee. The 250,000-kilowatt natural gas-fired unit, like its predecessors, is a 50-50 joint venture between KUA and the Florida Municipal Power Agency (FMPA). In early 2001, KUA also installed a \$14 million substation and a 10.5-mile, 69,000-volt transmission line to tie together several other substations.²

Even more exciting is KUA's plans to expand KUA.net. Currently on the drawing board is a utility plan to provide electric power and Internet service to a \$1.1 billion exhibition facility slated for construction in 2001 and 2002. The planned World Expo Center will be the largest trade and consumer facility in North America, comprising more than three million square feet of exhibition space, a one-million-square-foot retail center, more than 5,000 hotel rooms and parking for 20,000 cars. The electric power load from the World Expo Center alone will likely exceed demand on the entire existing KUA system.³

KUA.net began to break even by early 2001, as utility crews raced to extend service to the many local convention and meeting facilities, hotels, banks and commercial office buildings in the area. KUA hopes to roll out a wireless Internet service by the end of 2001.⁴ KUA is perhaps the best investment ever made by the city of Kissimmee. In the year 2000, KUA paid the city \$6.2 million from electric utility revenues and an additional \$515,000 it collects on a utility tax for residents who live outside the city limits. KUA also remitted more than \$26 million from fees collected for water, sewer and garbage services. Utility President and General Manager James Welsh pointed out that KUA's contribution to the municipal budget keeps ad valorem taxes lower in Kissimmee than in many other Central Florida communities.⁵

KUA's challenges in its second century of operations will be no more nor less difficult than those faced by the utility's previous managers and work force. Electric utility deregulation and a new competitive electric power marketplace will prove to be every bit as daunting as providing reliable electric service to Kissimmee residents in the early 1900s or meeting the exploding demand for electric power in the wake of Disney World's opening in the early 1970s.

For Jim Welsh, the utility's greatest strength today and in the future is its ownership by the citizens of Kissimmee. What won't change in KUA's second century is the utility's commitment to provide "the lowestcost power at the highest level of reliability," Welsh said. "For 100 years now, we've had a pact with the community. This is, and always has been, the community utility."⁶

SAILING IN UNCHARTED WATERS

KUA and the rest of Florida's municipal utilities are working hard to ensure that what happened to California electric utility ratepayers in 2000 and 2001 doesn't happen in Florida.

In the late 1990s, California engaged in an electric utility deregulation scheme that went spectacularly awry. Electric utility deregulation envisions breaking down the barrier of monopoly service to let other entrants into the business of generating and transmitting power. The theory holds that increasing the number of competitors in the business will inevitably bring down the price of electricity to the end use consumer.

That's not the way it worked out in California. The California Legislature forced utilities to sell generating assets to competitors, but the legislature refused to deregulate the rates that utilities charged to their customers. Prices to consumers skyrocketed as electric blackouts rolled across the Golden State. One of California's bedrock investor-owned utilities, Pacific Gas & Electric, filed for protection under the bankruptcy laws.¹ In effect, California's electric utility industry sailed off into uncharted waters with nobody at the helm.

"What happened in California is a travesty," said Jim Welsh, KUA's president and general manager. "I characterize it as a legalized financial rape of the ratepayers."

KUA, the FMPA and Florida's municipal utilities have been actively lobbying the Florida legislature since 1999 not to inflict a California-style deregulation model on the ratepayers of the Sunshine State. During the 2001 session, there were deregulation proposals before the legislature that would have accomplished exactly that.

"They'd do exactly the same thing as was done to the people of California," Welsh pointed out, "only worse."

KUA doesn't oppose the idea of electric utility deregulation. As a municipal utility, it has long been a proponent of competitive choice for electricity. "Deregulation is God, mom and apple pie," Welsh said, "especially when you're talking about competition and freedom of choice." But Welsh quickly added that electric power "is a complex industry, and legislators have to rely on experts anytime they are thinking of changing the system."

Florida's 2020 Study Commission has been wrestling with the issue of electric utility deregulation since early 2000. One of the options the commission has addressed would allow Florida's investor-owned utilities to spin off billions of dollars in generating assets to unregulated subsidiaries at book value in order to recover the so-called stranded costs in those assets. Such a proposal could stick millions of Florida ratepayers with sharply higher power costs while proving to be a financial windfall to the utilities involved.⁵

Welsh is a frequent speaker on deregulation to community and civic associations in Kissimmee and Osceola County. He told one such group that KUA and Florida's municipal utilities have gotten into the deregulation debate for two reasons. "We didn't want California to happen here," Welsh said, "and it wasn't right for Floridians."

KUA's outspoken activism in the utility deregulation debate is driven by the utility's century-long commitment to provide low-cost, reliable electricity to the residents of Kissimmee. Sharply increasing the cost of wholesale electric power in the wake of a botched deregulation effort would inevitably affect all utility ratepayers in the state, including those in Kissimmee.

"We're talking billions and billions of dollars here," Welsh told the Kissimmee Rotary Club early in 2001. "If it does get done the wrong way, there's only one person who's going to pay for it – and that's the consumer."

1 Beck, "U.S. Utilities on Fast Road to Electric Deregulation," Location
USA, 1998, pp.13-17
2 Jim Welsh, Presentation to Kissimmee Rotary Club, February 26,
2001
3 Ibid.
4 Ibid.
5 Ibid.
6 Ibid.

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2000 Fires

Firestone recalls 6.5 million tires.

001 KUA celebrates its 100th year of service in the Kissimmee area.

World Trade Center falls, Pentagon attacked. America declares war on terrorism.

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