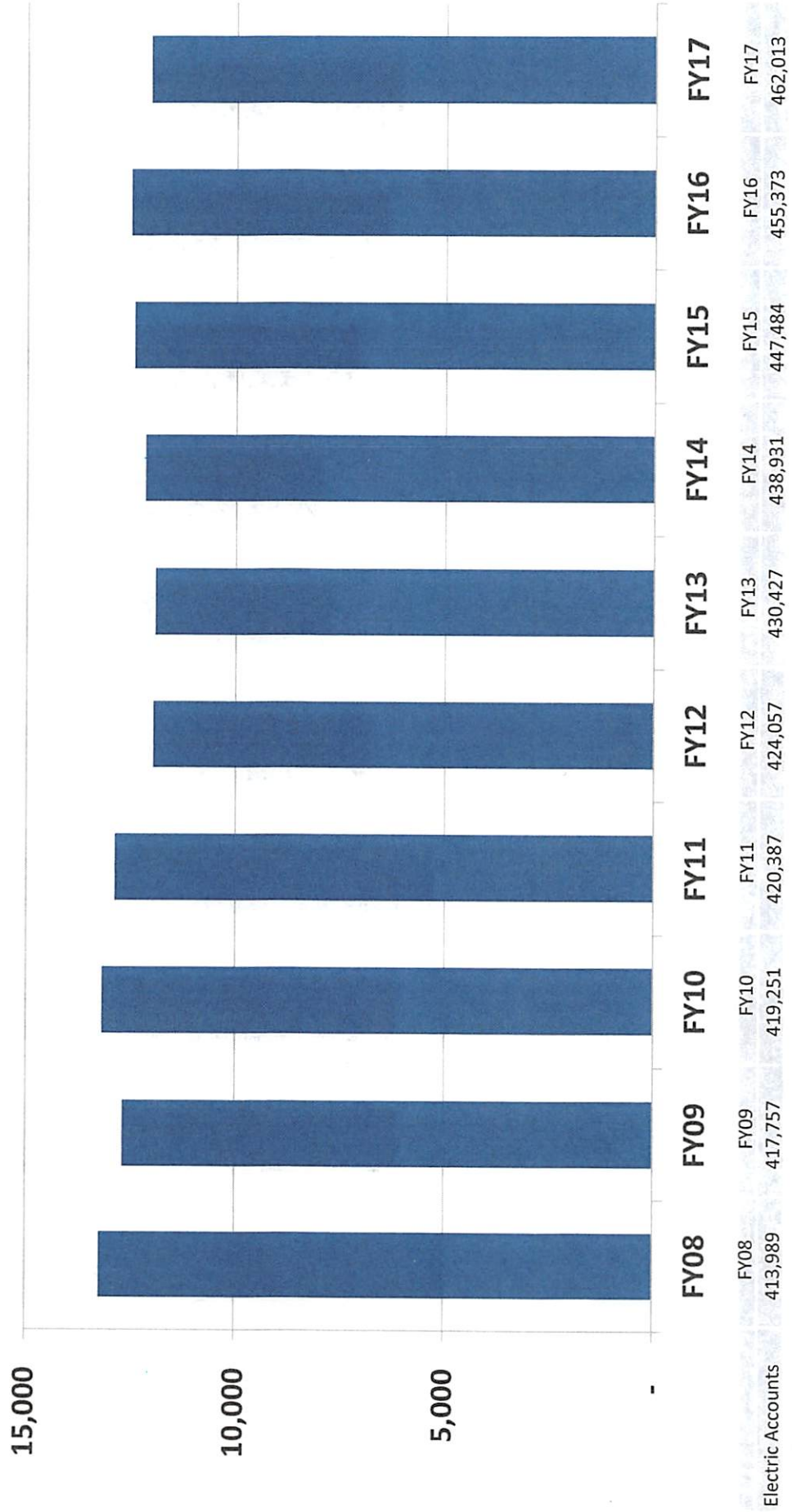


Electric System: MWh Sales

MWh Sales
(in Thousands)



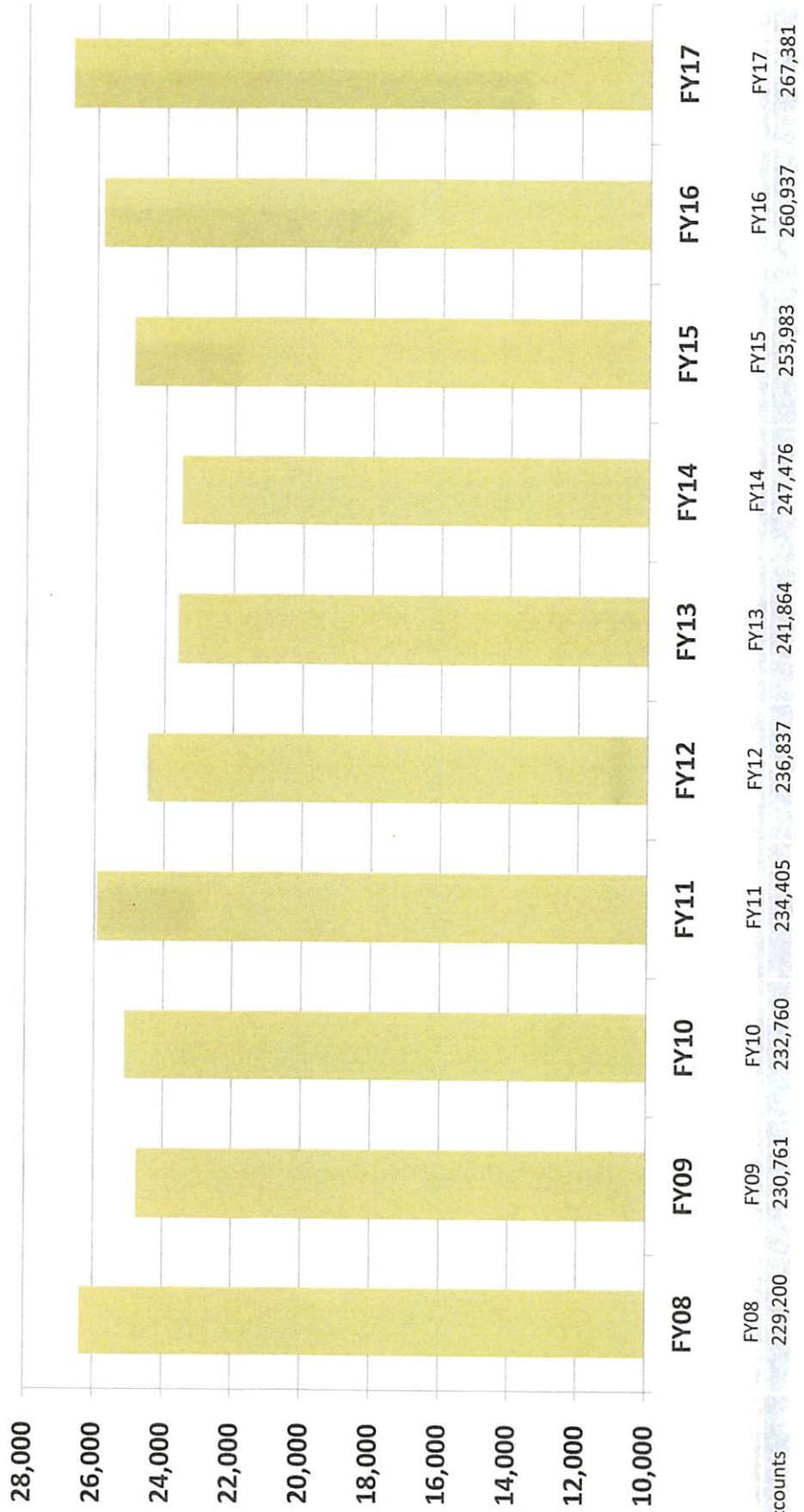
Water System: kGal Sales

Water kGal Sales
(in Thousands)



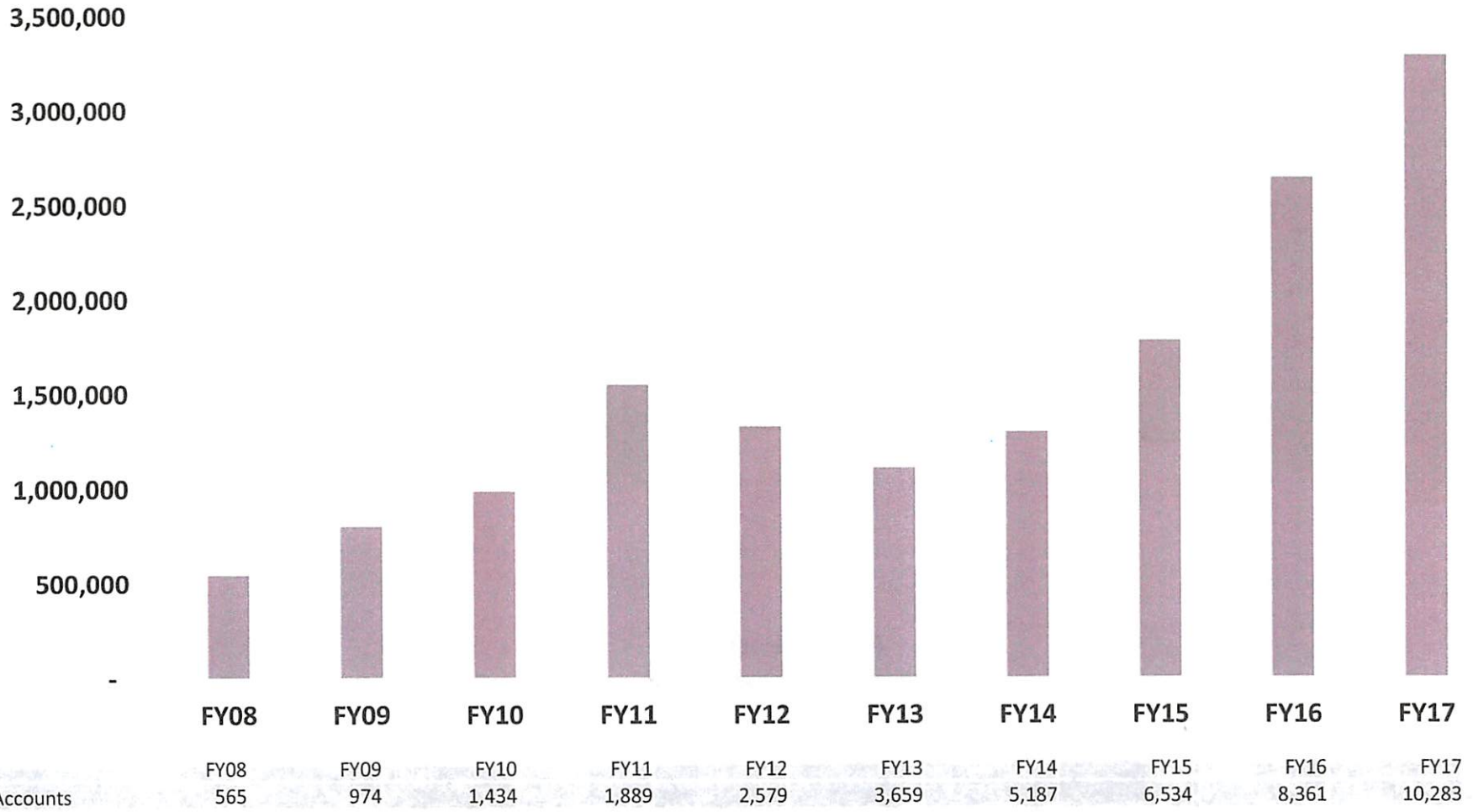
Sewer System: kGal Sales

Sewer kGal Sales
(in Thousands)



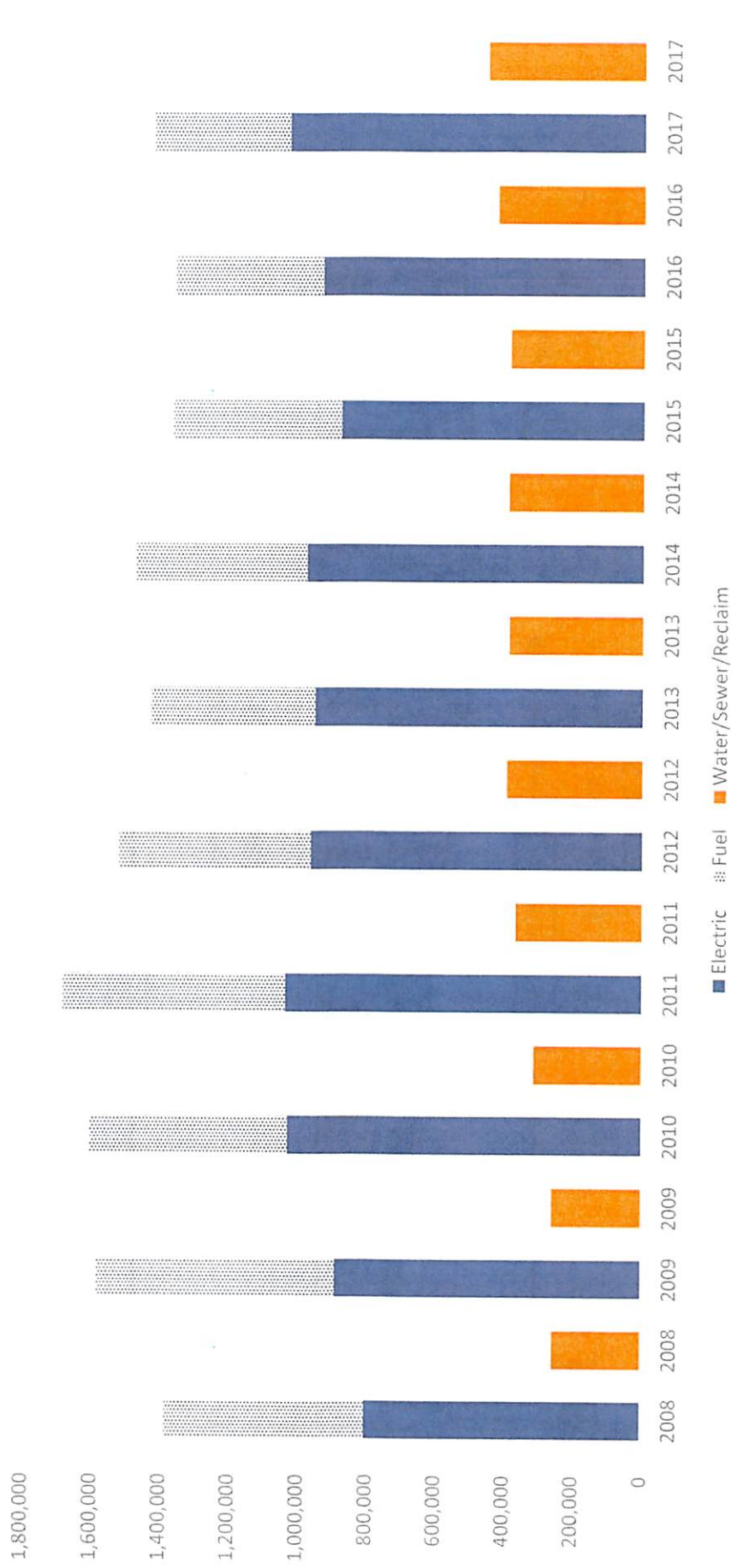
Reclaim System: kGal Sales

Reclaim kGal Sales (in Thousands)



Operating Revenues

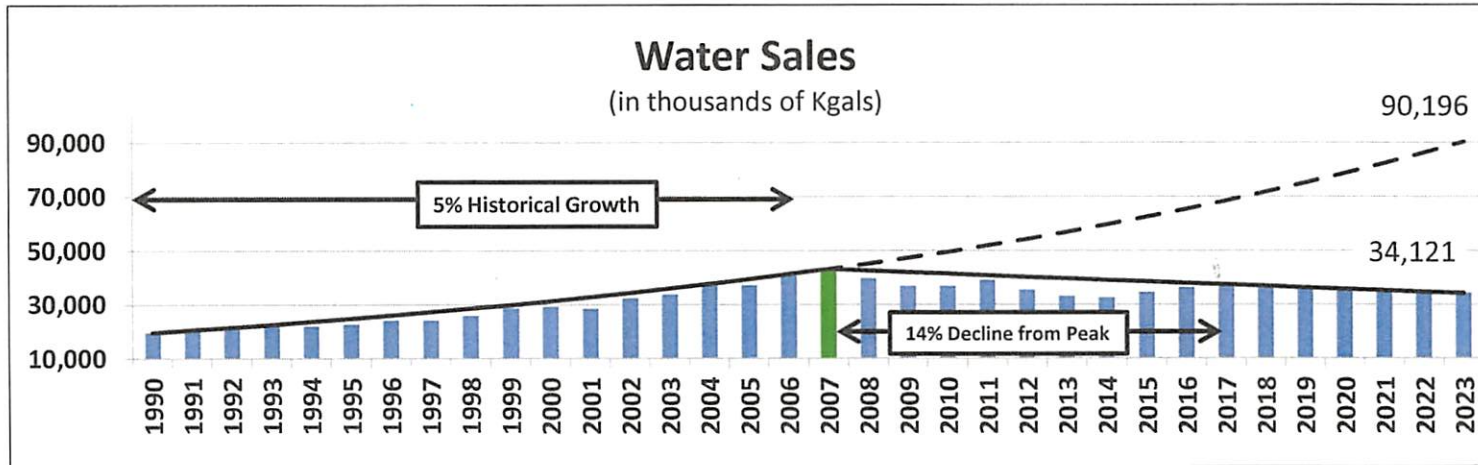
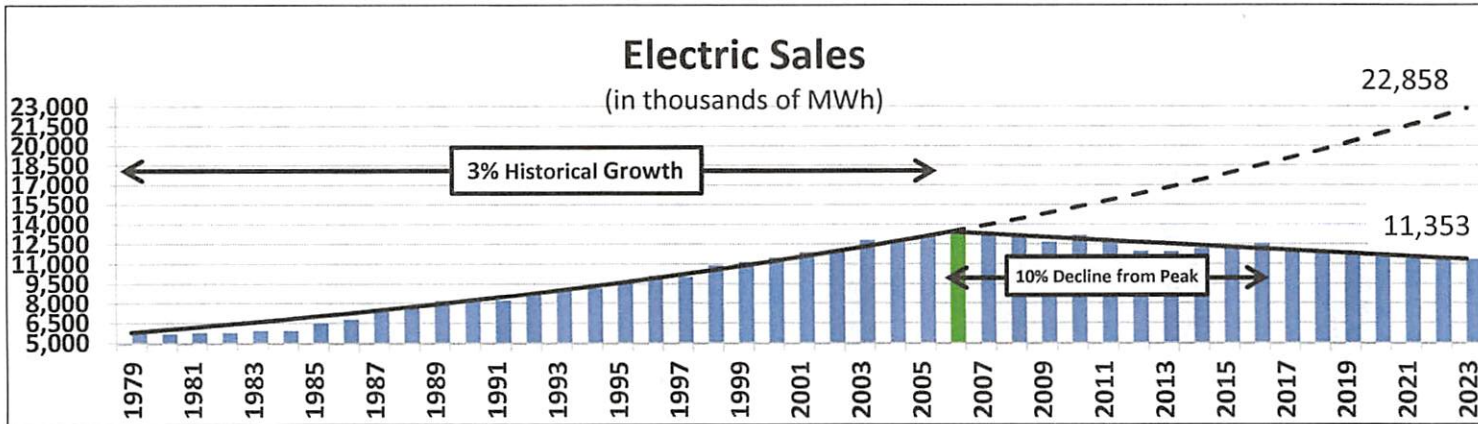
Operating Revenues



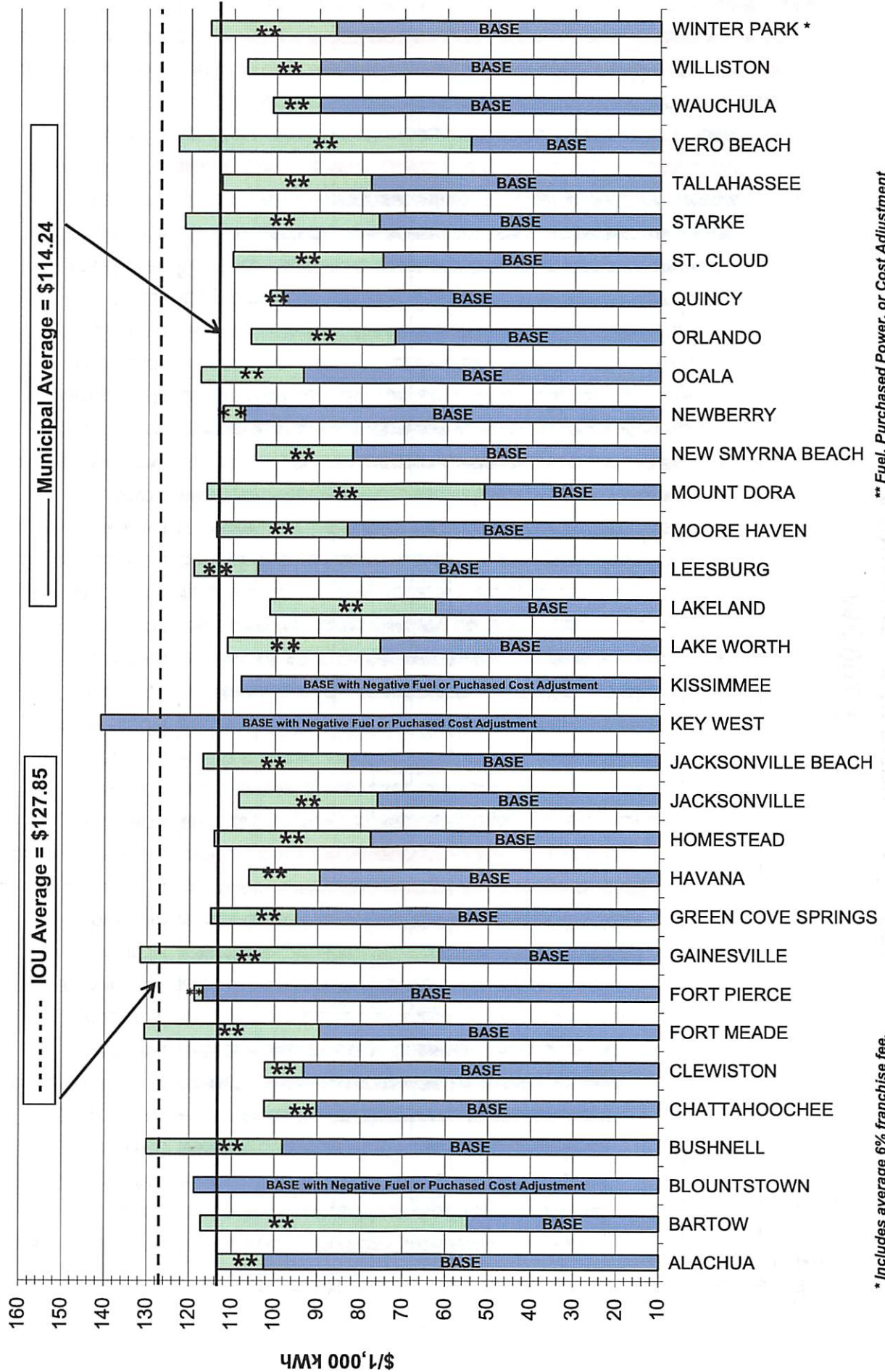
Operating Revenues (In thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Electric	1,385,234	1,584,572	1,684,131	1,606,474	1,524,963	1,432,617	1,479,483	1,370,212	1,364,242	1,428,329
Water/Sewer/Reclaim	257,657	259,275	313,136	368,087	395,437	390,692	393,355	389,733	427,750	457,908



JEA Sales



Residential Bill Comparison, January 2018



———— Municipal Average = \$114.24

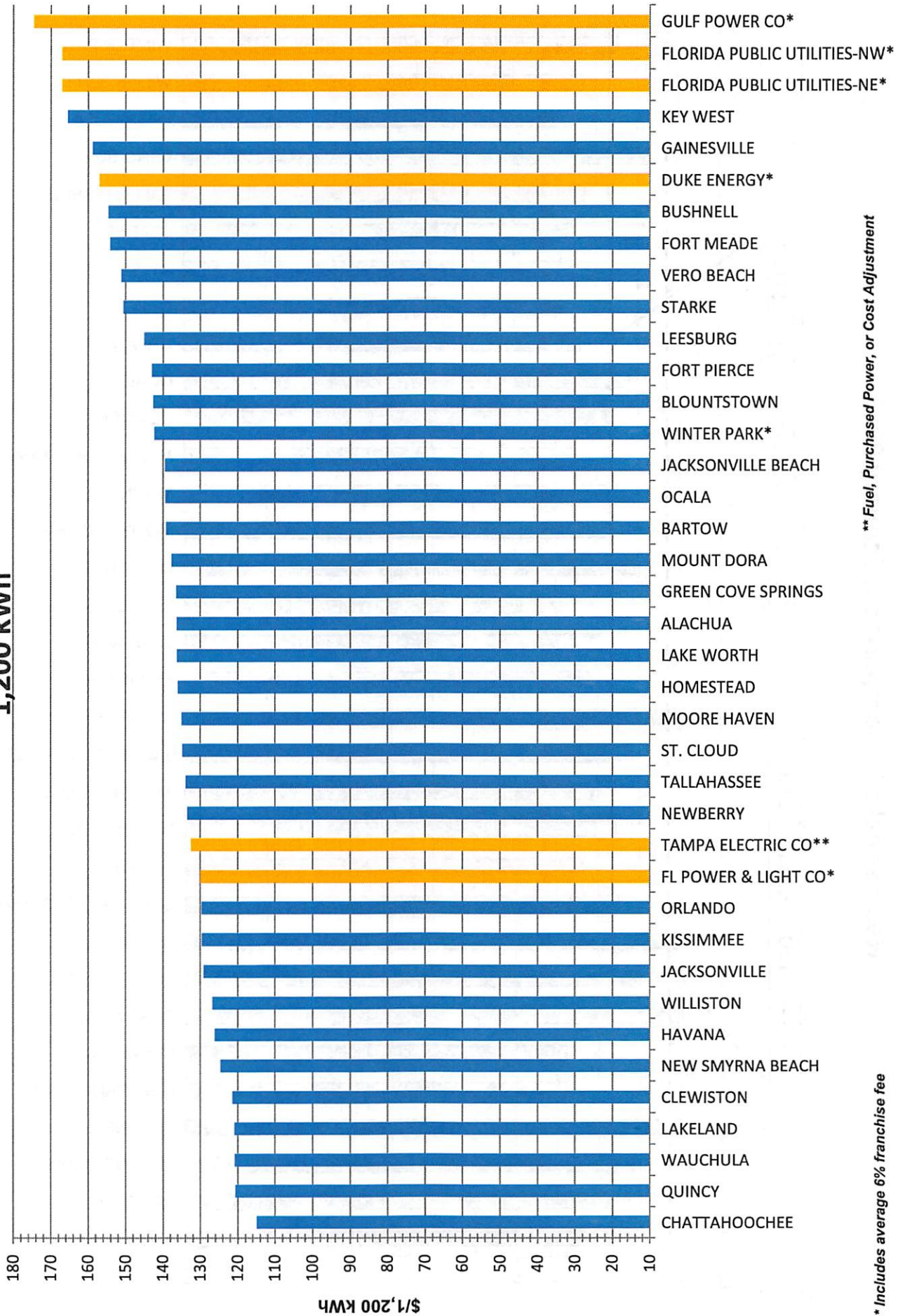
----- IOU Average = \$127.85

** Fuel, Purchased Power, or Cost Adjustment

* Includes average 6% franchise fee.

Lowest to Highest Residential Bill Comparison, January 2018

1,200 kWh



** Fuel, Purchased Power, or Cost Adjustment

* Includes average 6% franchise fee

COMPARISON OF RESIDENTIAL ELECTRIC RATES COMPILED BY FLORIDA MUNICIPAL ELECTRIC ASSOCIATION, INC. - TALLAHASSEE, FLORIDA

January 2018		1,000 KWH			***	1,200 KWH			***	2,500 KWH			***	
CITY	Customer Charge	Base Rate (Includes Customer Charge)	Fuel or Cost Adjustment	Total	Total with franchise or transfer fee payment	Base Rate (Includes Customer Charge)	Fuel or Cost Adjustment	Total	Total with franchise or transfer fee payment	Base Rate (Includes Customer Charge)	Fuel or Cost Adjustment	Total	Total with franchise or transfer fee payment	Additional Tax
ALACHUA		9.14	102.40	11.00	113.40		123.12	13.20	136.32		257.80	27.50	285.30	10%
BARTOW		8.00	54.70	62.50	117.20		64.04	75.00	139.04		124.75	156.25	281.00	10%
BLOUNTSTOWN		3.50	118.85	0.00	118.85		142.62	0.00	142.62		297.13	0.00	297.13	5%
BUSHNELL		7.40	98.05	32.00	130.05		116.18	38.40	154.58		234.03	80.00	314.03	10%
CHATTAHOOCHEE		6.50	90.10	12.22	102.32		100.32	14.67	114.99		209.00	30.55	239.55	NONE
CLEWISTON		6.50	93.20	9.06	102.26		110.54	10.87	121.41		223.50	22.65	246.15	10%
FORT MEADE		12.96	89.56	41.00	130.56		104.88	49.20	154.08		204.46	102.50	306.96	10%
FORT PIERCE		6.01	116.84	2.00	118.84		140.56	2.40	142.96		294.80	5.00	299.80	10%
GAINESVILLE	G	14.25	61.55	70.00	131.55		74.75	84.00	158.75		160.55	175.00	335.55	10%
GREEN COVE SPRINGS		12.00	95.00	20.00	115.00		112.40	24.00	136.40		225.50	50.00	275.50	NONE
HAVANA		6.00	89.50	16.62	106.12		106.20	19.94	126.14		214.75	41.55	256.30	NONE
HOMESTEAD	G	5.60	77.60	36.63	114.23		92.00	43.96	135.96		185.60	91.58	277.18	10%
JACKSONVILLE	G	5.50	76.00	32.50	108.50		90.10	39.00	129.10		181.75	81.25	263.00	10%
JACKSONVILLE BEACH		4.50	83.07	33.84	116.91		98.78	40.61	139.39		200.93	84.60	285.53	NONE
KEY WEST	G	18.00	143.90	-3.00	140.90		169.08	-3.60	165.48		332.75	-7.50	325.25	NONE
KISSIMMEE	G	10.17	133.27	-36.26	97.01	108.07	173.07	-43.52	129.55	142.82	349.55	-90.65	258.90	8%
LAKE WORTH	G	10.53	75.51	35.78	111.29		93.31	42.93	136.24		209.01	89.45	298.46	10%
LAKELAND	G	9.50	62.60	38.75	101.35		74.34	46.50	120.84		156.27	96.88	253.15	10%
LEESBURG		12.20	104.22	15.00	119.22		126.98	18.00	144.98		274.96	37.50	312.46	10%
MOORE HAVEN		8.50	83.30	30.60	113.90		98.26	36.72	134.98		195.50	76.50	272.00	10%
MOUNT DORA		9.31	51.21	65.01	116.22		59.59	78.01	137.60		114.06	162.53	276.59	10%
NEW SMYRNA BEACH	G	5.65	82.10	22.68	104.78		97.39	27.22	124.61		196.77	56.70	253.47	9.25%
NEWBERRY		7.50	107.50	5.00	112.50		127.50	6.00	133.50		257.50	12.50	270.00	10%
OCALA		9.33	93.64	24.00	117.64		110.50	28.80	139.30		220.11	60.00	280.11	10%
ORLANDO	G	8.00	72.18	33.82	106.00		87.02	42.58	129.60		183.45	99.55	283.00	10%
QUINCY		6.00	98.41	3.10	101.51		116.89	3.72	120.61		237.03	7.75	244.78	10%
ST. CLOUD	G	8.32	75.07	35.17	110.24		90.50	44.28	134.78		190.80	103.53	294.32	8%
STARKE		N/A	75.95	45.50	121.45		96.00	54.60	150.60		230.02	113.75	343.77	10%
TALLAHASSEE	G	7.59	77.81	35.00	112.81		91.85	42.00	133.85		183.14	87.50	270.64	10%
VERO BEACH	G	8.33	54.43	68.52	122.95		68.89	82.22	151.11		162.89	171.30	334.19	10%
WAUCHULA		11.50	89.90	11.00	100.90		107.58	13.20	120.78		222.50	27.50	250.00	10%
WILLISTON		8.00	89.84	17.10	106.94		106.21	20.52	126.73		212.60	42.75	255.35	5%
WINTER PARK		14.04	79.63	29.31	108.94	115.48	97.14	37.17	134.31	142.37	210.93	88.23	299.21	317.16 APPL
FL POWER & LIGHT *	G	7.94	76.98	23.17	100.15	106.16	92.81	29.80	122.61	129.97	195.71	72.93	268.64	284.76 APPL
GULF POWER *	G	19.50	102.30	38.10	140.40	148.82	118.86	45.72	164.58	174.45	226.50	95.25	321.75	341.06 TAXES
DUKE ENERGY*	G	8.82	82.40	38.38	120.78	128.03	99.97	48.06	148.03	156.91	214.18	110.95	325.13	344.64 ADD
TAMPA ELECTRIC**	G	16.62	68.62	28.18	103.35	109.55	81.24	35.82	124.92	132.42	163.24	85.45	265.07	280.97 FEES
FLORIDA PUBLIC UTILITIES-NE*	G	15.12	36.29	93.20	129.49	137.26	43.22	114.34	157.56	167.01	88.30	251.75	340.05	360.45 TAXES
FLORIDA PUBLIC UTILITIES-NW*	G	15.12	36.29	93.20	129.49	137.26	43.22	114.34	157.56	167.01	88.30	251.75	340.05	360.45 TAXES

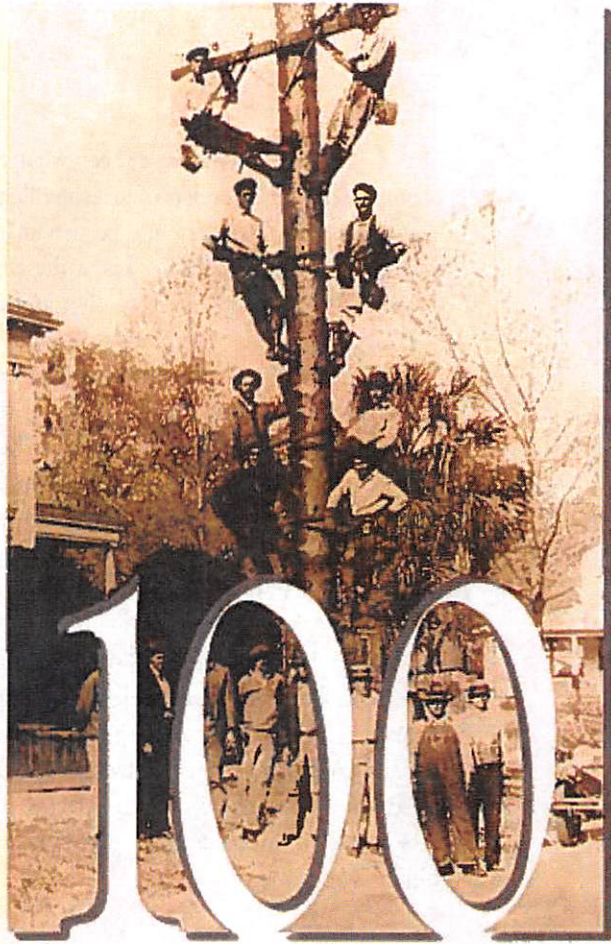
*Rates for municipal utilities INCLUDE payment-in-lieu of tax to the city's general fund. Rates for investor-owned utilities DO NOT INCLUDE franchise fee payments, which average 6% across Florida. G = Generating utility. **Total includes conservation, capacity, environmental and refund credit (if applicable). ***Total include 6% franchise fee for IOUs. For municipal utilities, total include actual transfer payment.

Council Auditor's Office
JEA Payment Information
FY 2009 - 2018

Description	FY 2018 *	FY 2017	FY 2016	FY 2015	FY 2014
Contribution to General Fund from JEA	\$ 116,619,815	\$ 115,822,950	\$ 114,187,538	\$ 111,687,538	\$ 109,187,538
City Franchise Fee collected by JEA	38,765,323	38,244,055	39,202,965	39,599,067	39,018,021
City Utility Service Tax collected by JEA	89,245,441	86,667,471	87,289,621	84,546,762	83,275,603
Total	\$ 244,630,579	\$ 240,734,475	\$ 240,680,123	\$ 235,833,367	\$ 231,481,162

Description	FY 2013	FY 2012	FY 2011	FY 2010	FY 2009
Contribution to General Fund from JEA	\$ 106,687,538	\$ 104,187,538	\$ 101,687,540	\$ 99,187,528	\$ 96,687,546
City Franchise Fee collected by JEA	37,603,803	39,320,997	41,743,481	38,490,955	37,541,551
City Utility Service Tax collected by JEA	81,631,385	80,784,137	85,125,451	80,369,088	70,727,230
Total	\$ 225,922,726	\$ 224,292,672	\$ 228,556,472	\$ 218,047,571	\$ 204,956,327

* FY 2018 numbers are projections from the Budget Office's 12/31/17 quarterly summary that are reasonable.

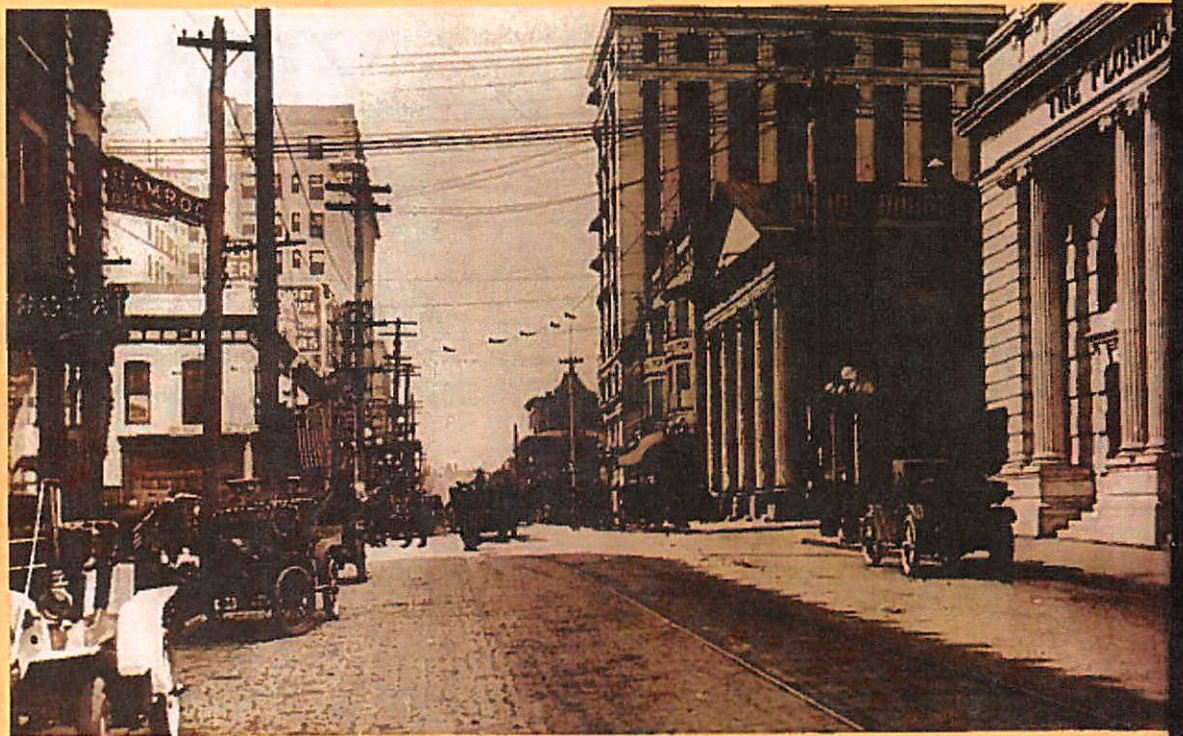


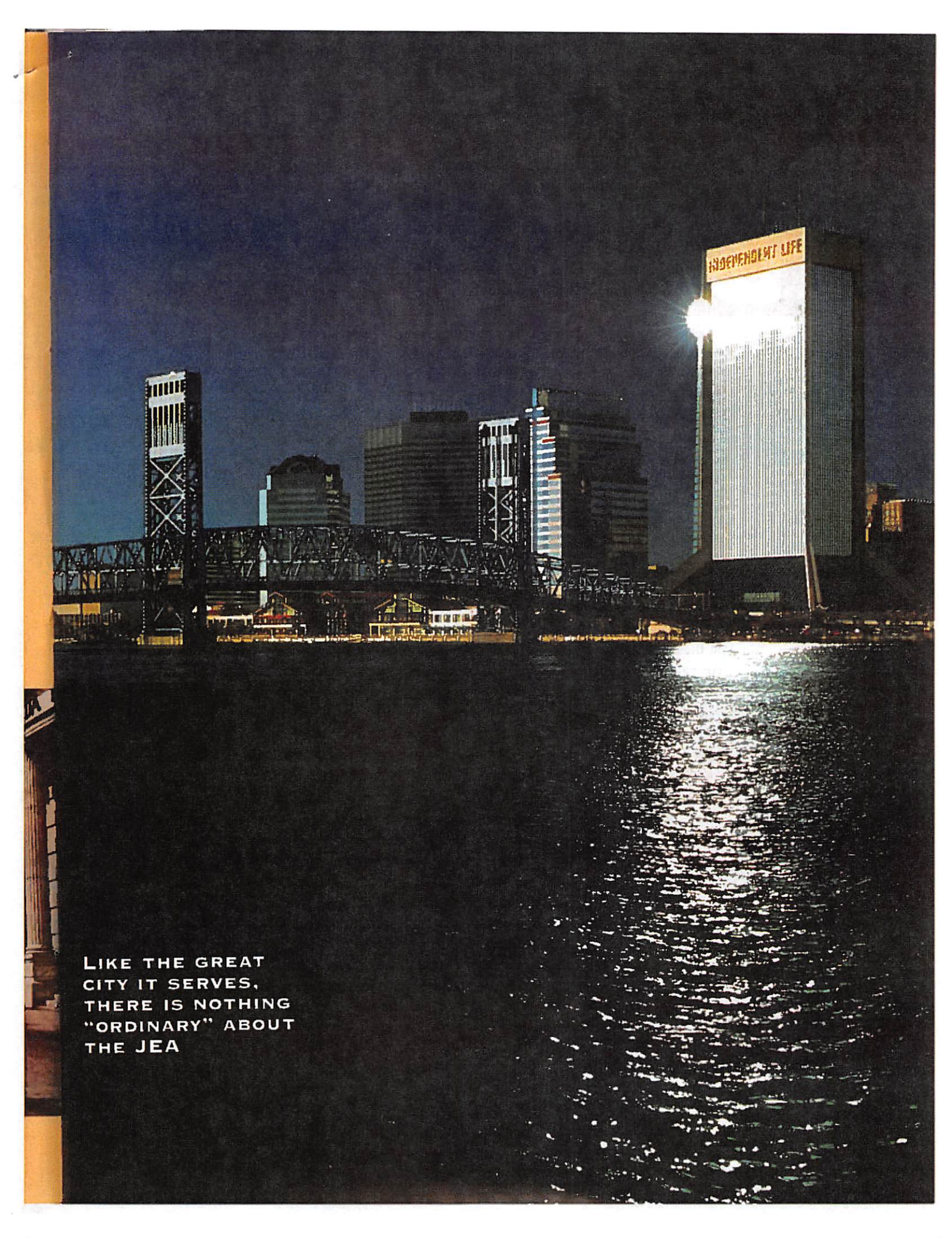
**YEARS
OF SERVICE**

**Jacksonville
Electric Authority
Annual Report
1995**

JACKSONVILLE has never been what you'd call an "ordinary" city. ■ Within days of laying out the city, the founders of Jacksonville petitioned the federal government to be named a port of entry. That boldness, and persistent follow-up, have made Jacksonville, 20 miles from the ocean, a major seaport. ■ Later, the city was a leader in building local railroads. Larger railroad systems linked them together and that's why Jacksonville is a railroad center. ■ Later, before any other city in Florida, Jacksonville built its own expressway system...and bridges, one after another. ■ Over a decade ago, the city embarked on what seemed to be a hopeless quest for a National Football League team. It wasn't. The Jacksonville Jaguars are now — in 1995 — playing their first NFL season. ■ The September 1995 issue of Money Magazine rated Jacksonville as Number Three among the best cities in America to live. The growth of the city and its publicly-owned electrical system has been remarkable — one complementing the other. ■ For its first 70 years, the electric system was a department of the city, first run by the Department of Public Works, then by a Board of Bond Trustees, then by City Commissioners. ■ That changed when, on Aug. 8, 1967, the City of Jacksonville and the County of Duval voted to become one — a consolidated city — and the electric system became an independent authority, the Jacksonville Electric Authority (JEA). ■ Since then the JEA has continued to make progress, developing its people, contributing funds to the City's General Fund, strengthening its own finances, generating satisfaction for its customers. ■ Today, when deregulation is bringing competition, as never before, to the electric utility industry, the JEA is rated as the one "most likely to succeed" in a competitive environment. ■ Like the great city it serves, there is nothing "ordinary" about the JEA.

Forsyth Street in the Jacksonville of 1911-12 — At this time, it's been about 15 or 16 years since Jacksonville got the Main Street Light Plant; the city now has its second, the Talleyrand Avenue Light Plant. The city's trolley cars run by electricity. Handsome street lamps, like the one at far right, on the corner of Forsyth and Laura streets, were installed because "business followed the lights." In 1912, Jacksonville will start taking down those light poles, putting the wires underground and taking pride in "looking like a million."





LIKE THE GREAT
CITY IT SERVES,
THERE IS NOTHING
"ORDINARY" ABOUT
THE JEA

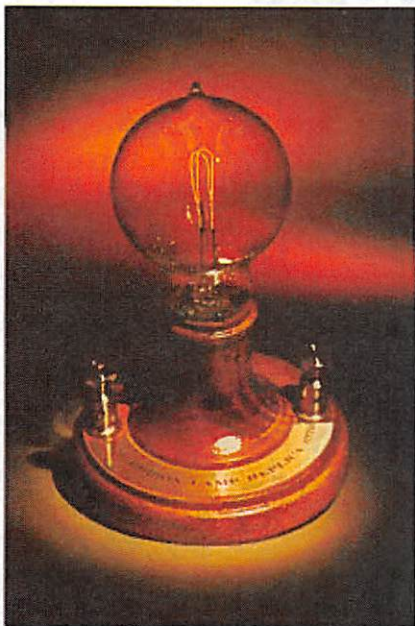
ELECTRICITY, IN 1895, when the City of Jacksonville built its first electric light plant, was just being exposed to the general public. ■ The first commercially successful electric generator had been developed in 1872. The only electric lights available at the time were arc lights: The “arc” was simply a giant spark that leaped from one carbon conductor to another. ■ Arc lights were too bright and hazardous for indoor use. But they could be used for street lighting. And, beginning in the late 1870s, arc lighting systems were installed in Paris, New York and a number of other cities. ■ But when Thomas Edison invented a better light — the incandescent bulb — electricity really took off. ■ Edison demonstrated his new light bulb in 1879 and patented it in 1880. Edison knew his incandescent bulb needed to be part of a complete electrical system from the dynamo to the switches that turned lights on and off. ■ By 1882, the Edison Electrical Illuminating Company had completed the first central incandescent lighting system in downtown Manhattan. ■ Just one year later, in 1883, Jacksonville’s St. James Hotel was equipped with its own generator and lit — inside and out — with three arc lights and five incandescent lamps. ■ That was remarkable. Although Jacksonville was then, with a population of about 25,000, the largest city in Florida, there were only about 250,000

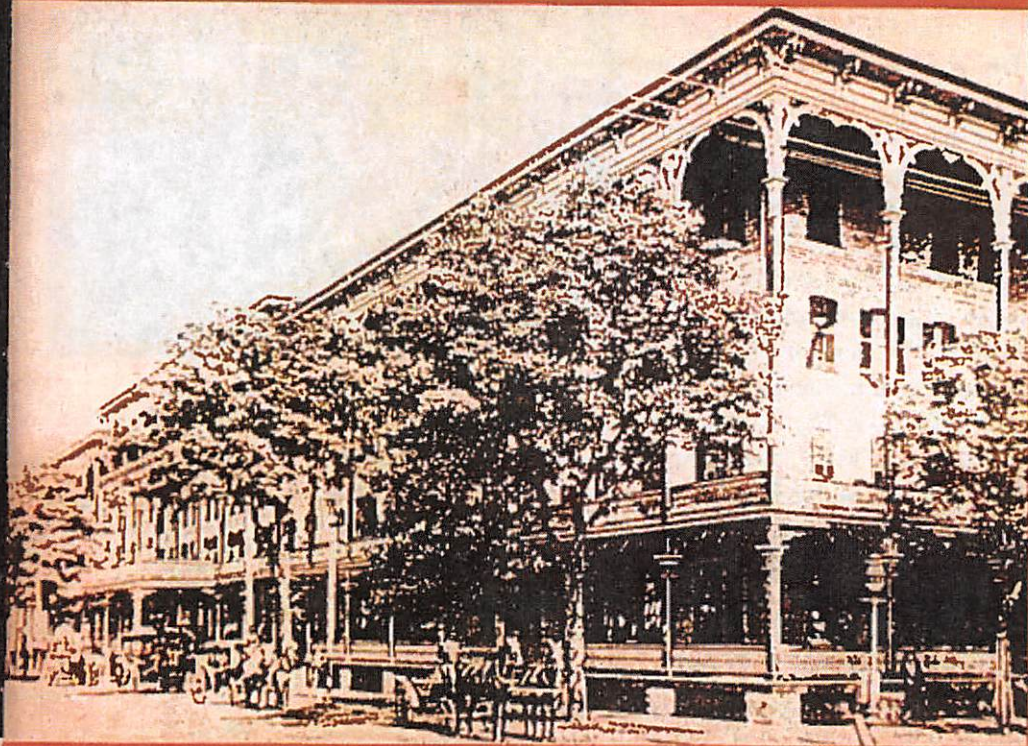
THAT’S WHEN THE BOARD OF PUBLIC WORKS ESTIMATED THAT \$75,000 WOULD ESTABLISH A COMPLETE MUNICIPAL ELECTRIC SYSTEM THAT THE CITY COULD USE — AND OFFER ITS CITIZENS.

Thomas Edison’s incandescent bulb — One hundred years ago, electricity introduced new forms of light. First, the arc light — a giant spark, bright but hazardous. Then, an improvement, Edison’s incandescent light — a glowing filament housed in a glass bulb. It introduced electricity to the world.

people in the whole state. Most of Florida was wilderness. But Jacksonville regarded itself as a progressive city and everyone knew that the streets of Jacksonville, lit by oil lamps and gas lights, were not as well lit as they should be. ■ In 1885, a privately owned electric light company was formed in the city that provided arc lights to 60 business subscribers. Later in the year, another electric company came to Jacksonville offering both arc and incandescent lights to homes and businesses...at about half the price of the first company. ■ That’s when the owner of the gas company “saw

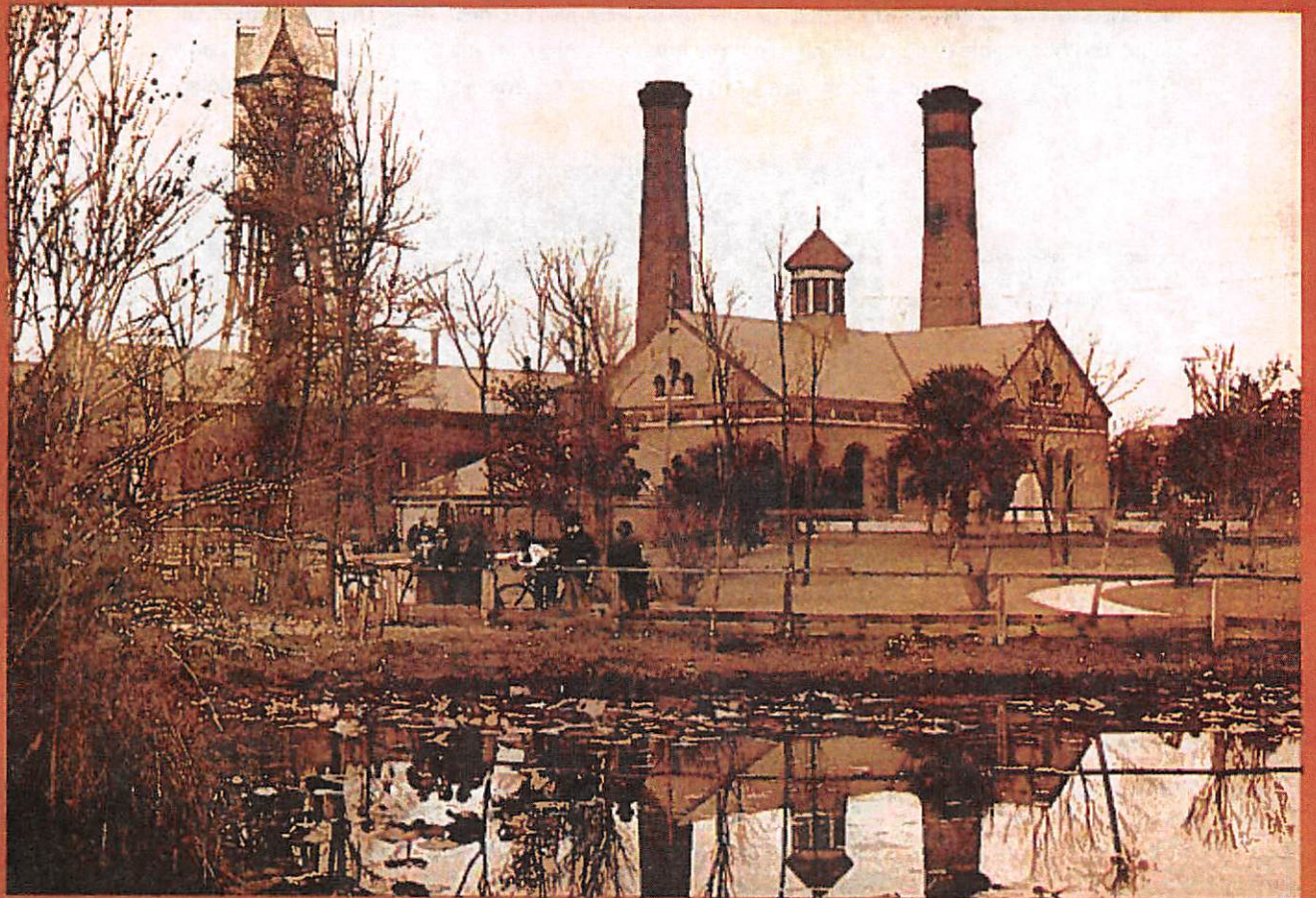
the light.” He bought both electric companies. Now, with his Jacksonville Gas Company and Jacksonville Electric Light Company, he had a monopoly on light — gas or electric. ■ So, in 1892, when the city wanted 10 arc lights installed on Bay Street between Broad and Liberty streets, there was no choice. And the city was not happy about that. ■ Electricity, at local prices — 28 cents a kilowatt hour (kwh) — had made little progress. The few electric streetlights were confined to a small downtown area and fewer than 100 homes had been wired for light. ■ What’s more, the city felt it was paying heavily, \$8,000 a year, for the few gas and electric lights it used. That’s when the Board of Public Works estimated that \$75,000 would establish a complete municipal electric system that the city could use — and offer its citizens. ■ The voters of Jacksonville liked the idea. On Oct. 17, 1893, they approved, by a 3-to-1 margin, a \$1 million bond issue for city improvements, including \$75,000 for that electric light plant.



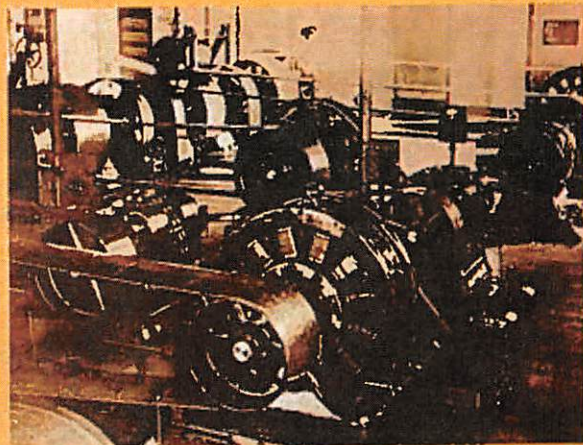


*The St. James Hotel in 1883 —
Just one year after Edison's system
lit downtown Manhattan, Jacksonville's
St. James Hotel was lit — inside and out —
with arc and incandescent lights.*

*The city's light plant at First and Main —
Disappointed by the lackluster efforts and
exorbitant prices of a private electric company,
the people of Jacksonville voted 3-to-1 to build
their own electric light plant.*



IN 1894, the city contracted for the building and equipping of the Main Street Light Plant at First and Main streets by the Water Works. But it was contested. Attorneys for the Jacksonville Electric Light Company brought suit against the city, contesting the right of the city to enter the electric business and make public power available to all. ■ The lawsuits did not stop the city. Its new power plant was erected on the Water Works grounds and 55 miles of wire were strung out over 1,650 poles. Most of the 95 arc lights and 292 incandescent lights were concentrated on the streets along Bay and Forsyth and sections of what is now Riverside Avenue. After a brief delay in construction caused by hurricane damage, the system was completed. At 6:40 p.m., March 7, 1895, while "Big Jim" — a steam whistle at the Water Works — alerted the waiting city, an engineer at the Main Street Light Plant pulled a switch that turned on the lights — and Jacksonville celebrated. ■ Jacksonville's streets now had the electric street lights that its citizens wanted. But the Board of Public Works, which managed the plant, quickly found that the people of Jacksonville wanted more than street lights. No longer satisfied with kerosene lamps, they wanted electric lights in their homes and businesses. The initial 292 incandescent lights quickly grew to 6,941. ■ In 18 months, after all expenses, the city-owned electric plant was earning a profit for the city at the rate of about \$18,000 a year. And the demand for electricity in Jacksonville was so great that, to satisfy it, the electric plant would have to be enlarged. ■ With new equipment, it was estimated that the incandescent lights could be increased to 17,000 and arc lights to 375. But lights were just the beginning, the new equipment would also be capable of powering small motors, such as in electric fans, and electricity would now be available in the daytime. ■ By March of 1898, the new generating machinery had been deliv-



The first generators at Main Street Light Plant — These generators provided the power that — at 6:40 p.m. on March 7, 1895 — surged over 55 miles of wire, strung out on 1,650 poles, and lit 95 arc lights and 292 incandescent lights.

How Jacksonville looked in 1900 viewed from the light plant — The people of Jacksonville now wanted electric lights in their homes and businesses. The demand grew so great that to satisfy it, the electric light plant would have to be enlarged.





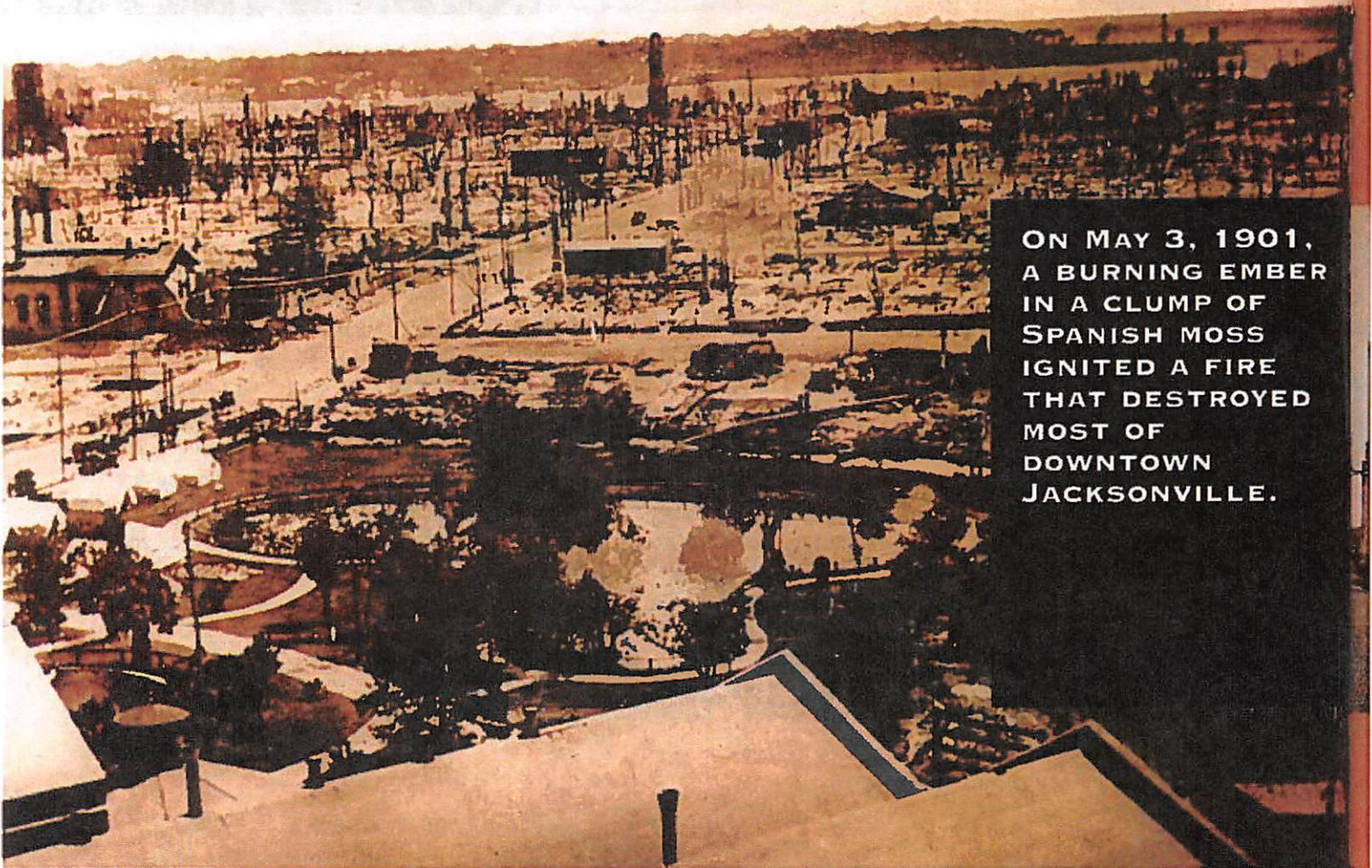
The corner of Bay and Main streets sometime after 1895 — Jacksonville now had what the people wanted. Note the arc light hung overhead, the electrified trolley car — no longer powered by horses or mules — and the lines of poles draped with dozens of electric, phone and telegraph wires.

**IN 18 MONTHS,
AFTER ALL
EXPENSES,
THE CITY-OWNED
ELECTRIC PLANT
WAS EARNING
A PROFIT FOR
THE CITY AT THE
RATE OF ABOUT
\$18,000 A YEAR.**

ered, all 90 tons of it, including equipment necessary to introduce a metered system for billing purposes. ■ But there were other arrivals, 32,000 troops, mobilized for the Spanish-American War, and typhoid fever. ■ In preparation for the coming of the troops, the city rushed utilities, including electricity, to their camp site, Camp Cuba Libre, north of the city. ■ The stricken at St. Luke's Hospital and the Camp Cuba Libre military hospital found some comfort in the newfangled electric fans run by the city's electricity. ■ And, in spite of the war and typhoid fever, in May of 1898, the first daylight electric service became available in Jacksonville. Another first: The City Electric Department managed to string wires through La Villa, Riverside and Springfield... lighting them for the first time on Christmas Eve as a "Christmas present." ■ Revenues in 1899 climbed to over \$77,000 and profits to \$36,000. In that same year, the management of both water and electric operations was turned over to the Board of Bond Trustees. The trustees were elected by the City Council and would now be responsible for funding and enlarging the power plant.

*Jacksonville flees from the Great Fire —
A burning ember in a clump of Spanish
moss created a fire storm that swept over
downtown Jacksonville, leaping from
block to block, often igniting and burning the
few possessions people tried
to take with them.*

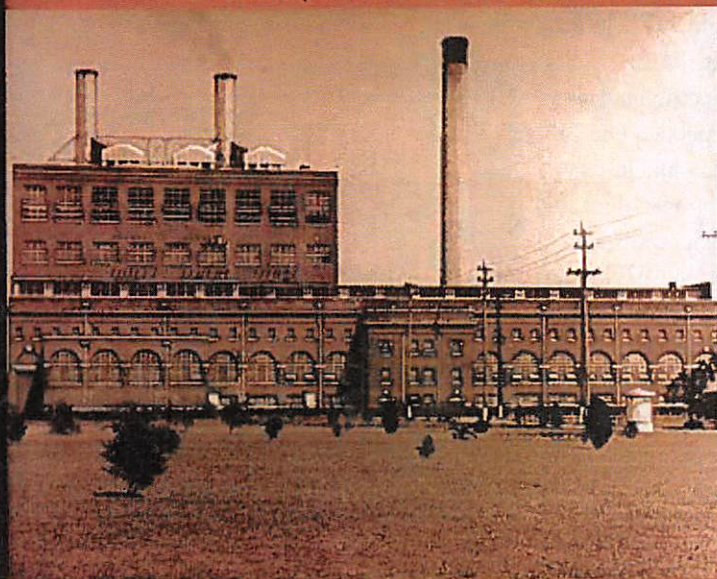
*The devastated area after the Great Fire,
again viewed from the Main Street
Light Plant — The city's downtown was
devastated. And so was its electric system.
Every transformer, light pole and street light
in the burned area was gone, including the
lines that carried power to other parts
of the city. But service was quickly
restored. In a week new poles
were set and new lines strung.*



**ON MAY 3, 1901,
A BURNING EMBER
IN A CLUMP OF
SPANISH MOSS
IGNITED A FIRE
THAT DESTROYED
MOST OF
DOWNTOWN
JACKSONVILLE.**

THEN, ON MAY 3, 1901, a burning ember in a clump of Spanish moss ignited a fire that destroyed most of downtown Jacksonville. The fire destroyed 23 churches, 10 hotels, all city buildings and 1,700 homes — a total of 2,368 structures — as well as every transformer, every light pole, every street light in the burned area. Only Springfield and the Main Street Light Plant at the Water Works were spared. The damage to the electrical distribution system alone totalled \$46,566. But recovery was fast. ■ May 4: City electric crews cleared away the wreckage and procured the materials they would need to rebuild. ■ May 5: The pole lines were put up. ■ May 6: Lights were furnished to Bay and Forsyth. ■ May 9: La Villa was lighted. ■ May 11: A new line was completed to East Jacksonville. ■ The people of the city were not far behind their electric department. By December of 1901, 2,593 buildings had been erected to take the place of those that were lost to the fire. And the electric department was able to give the city treasurer a check for \$17,000 in profits that, in spite of the fire, had been earned that year. ■ However, as the electric department was to discover, the fire led to more people wanting electricity than ever before. The thousands of new structures that had been built were invariably wired for electricity. The electric plant would have to be enlarged again. ■ In late 1902 and early 1903, two new generators and a 200-horsepower steam turbine were installed. The Main Street Light Plant's capacity, which had been 20,000 lights, was now increased to 40,000. But there still wasn't enough power to meet the demand. So, in October 1903, another 200-horsepower steam turbine was installed. ■ In 1904, as an economy measure, Texas oil replaced the old fuel, cords of wood. It took only four barrels of oil to take the place of 23 cords of wood. The oil cost 95 cents a barrel and using oil instead of wood allowed the plant's personnel to be reduced by three. ■ Then, on Sunday afternoon, March 5, 1905, a short circuit triggered a boiler explosion at the light plant. It left three dead and the city in darkness when evening came. ■ In spite of the devastation, an emergency crew started another boiler and restored the power by 8 p.m. that same evening. ■ Two 500-kilowatt turbo generators were added in 1906-1907 and two 1,500-kilowatt turbo generators in 1908-1909. ■ But the continually increasing demand for power soon led the Bond Trustees to recommend that a new electric plant be built in a new location on the St. Johns River. The city, they said, had outgrown its existing electric plant. If the city was to attract new business and insure continuing growth, they said, it was essential to provide electricity that would meet the needs of commerce and industry inexpensively. ■ The new

power plant, called the Talleyrand Avenue Light Plant, went on line on Sept. 6, 1912. It was equipped with four 1,500-kilowatt turbines. However, the Main Street Light Plant would still be used. It would provide a small portion of the power for the city; and it would be the distribution center for power from the new plant.

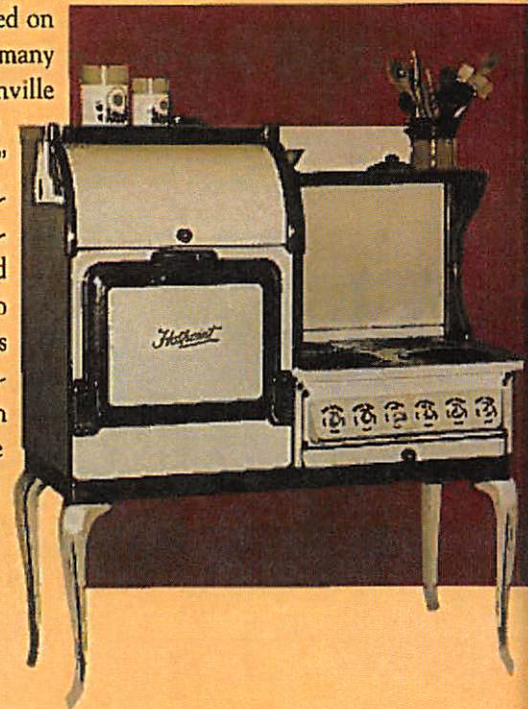


The Talleyrand Avenue Light Plant — The city had outgrown the Water Works plant. A new power plant in a new location by the river was needed. The new plant went on line on Sept. 6, 1912. At the same time, the city's power crossed the St. Johns River to South Jacksonville.

IN THAT SAME YEAR, the city's electric power crossed the St. Johns River into South Jacksonville. Lighting service was from 6 p.m. until midnight. Later, the current was turned on for two additional hours a day so that customers could use electric irons, toasters, sewing machines and other appliances they were beginning to buy. ■ Not all of the appliances were small. Soon, shiny white electric ranges began to replace the traditionally black coal stoves. The ice man was delivering less ice; iceboxes were being replaced with refrigerators. And vacuum cleaners were taking the place of rug beaters. Jacksonville's homes, like homes all over America, were beginning to be electrified. There seemed to be no limit to what electric power could do. ■ But some thought the Board of Bond Trustees had too much power. The board soon found its authority curbed; the trustees were ordered to submit an annual budget to the City Council; they were told they could not make the decisions on construction and repair projects — as they formerly had; and, in 1917, the Florida Legislature abolished the Board of Bond Trustees. ■ A five-member City Commission — to be elected by popular vote — was created to take its place. Now there was a City Commission and a City Council — each elected by popular vote; each with possibly divergent views. ■ But Jacksonville had other things to think about. On March 19, 1917, President Wilson asked Congress for a formal declaration of war against Germany. ■ Jacksonville did its job. And so did its electric system. The Talleyrand Avenue Light Plant, assisted by the Main Street Light Plant, was able to meet the enormous demands of Jacksonville's shipyards, other war industries and the military's needs, too. ■ At the end of the war, in 1919, the Talleyrand plant added a 4,000-kilowatt turbo generator and, in 1921, a still larger unit, a 10,000-kilowatt generator. ■ Then, at 11 p.m. on June 3, 1922, a short circuit in the switchboard of the old Main Street Light Plant started a fire that shut down its four small generators and, worst of all, shut off the distribution of power from the Talleyrand Avenue Light Plant. ■ The entire city was plunged into darkness. ■ The fire was quickly brought under control, but even before it was put out, efforts to restore power began. ■ Power was restored to Springfield, East Jacksonville and Fairfield by 2 a.m. By the following night, electric service was restored throughout Jacksonville — even at the old Main Street Light Plant, where two small units and one larger dynamo were back at work. ■ In 1921, the city's first bridge over the St. Johns River was built. In the following year, the city began to construct an electric line from the bridge to the beaches. It was completed on March 14, 1923. ■ The Florida land boom had brought many newcomers to the state. From 1924 through 1927, Jacksonville electrical consumption increased 57 percent. ■ Electricity was news. In 1926, Jacksonville's first "all-electric bungalow" was built in Springfield and opened to the public. The "all-electric bungalow" had a radio — broadcasting had just started — and other new appliances, like washing machines and freezers. ■ Naturally, the demand for electricity continued to be great. New equipment was needed, again. In 1929, it was installed at Talleyrand: a 25,000-kilowatt unit that would generate a kilowatt hour with half the fuel of a 1912 unit. ■ On Jan. 1, 1931, the Jacksonville city treasurer reported that the electric plant had, for the first time, contributed more than \$1 million to the general fund. That could be compared with the \$1.72 million the city collected in taxes.

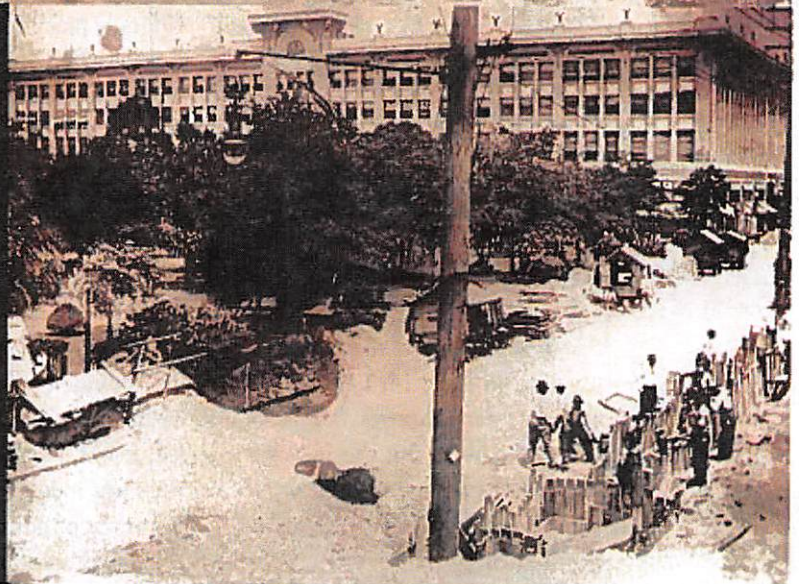
Electricity was news in 1926 — Jacksonville's first "all electric bungalow" was built in Springfield that year and opened to the public. It had a radio — broadcasting had just started — an electric cook stove and many other new appliances.

Jacksonville digs up its streets to beautify the city — Deciding that the many poles with their numerous wires were "unsightly," the city began, in 1912, to put the "unsightly" wires underground. It took three years and cost a half million dollars, but Jacksonville "looked like a million." The St. James Building at the rear of the bottom photo originally housed the Cohen Brothers Department Store.





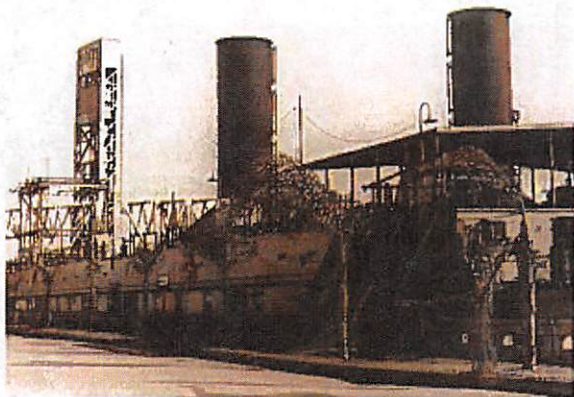
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IN MAY 26, 1931, Jacksonville and South Jacksonville voters agreed to consolidate the two cities. The following year, on Feb. 11, 1932, Jacksonville celebrated its 100th birthday. A little later, the New York World-Telegram and 25 other Scripps-Howard newspapers published a detailed report on the Jacksonville electric system. ■ Since 1895, the story said, the electric plant had grossed \$31 million, had net earnings of \$15.92 million, and contributed \$6.8 million of that to the city's general fund. ■ But new lines were needed, some of the distribution system needed overhaul, and some of the power equipment needed replacing. Total cost: \$2.5 million. ■ Just one 35,000-kilowatt turbine generator and its accessories were to cost \$1.8 million. Part of the \$2.5 million would be used in rural electrification, carrying electric power out into the rural areas of the county for the first time. ■ In 1938, the city's electric power plant contributed \$2.07 million toward the municipal budget of \$4.94 million. ■ Jacksonville's low tax rates were attracting national attention. An article in Better Homes and Gardens reported that Jacksonville enjoyed "the lowest per family tax of any city in the United States." ■ But war was on its way. By the summer of 1941, Jacksonville was well on its way to becoming a major military center. Camp Blanding had opened. The Jacksonville Naval Air Station was shortly to be commissioned. Wartime shipbuilding contracts would soon put 25,000 men and women to work in six shipyards. By the end of 1941, there were at least 100,000 newcomers in the area. ■ When war came, on Dec. 7, 1941, the importance of Jacksonville's electric power plants led to the construction of

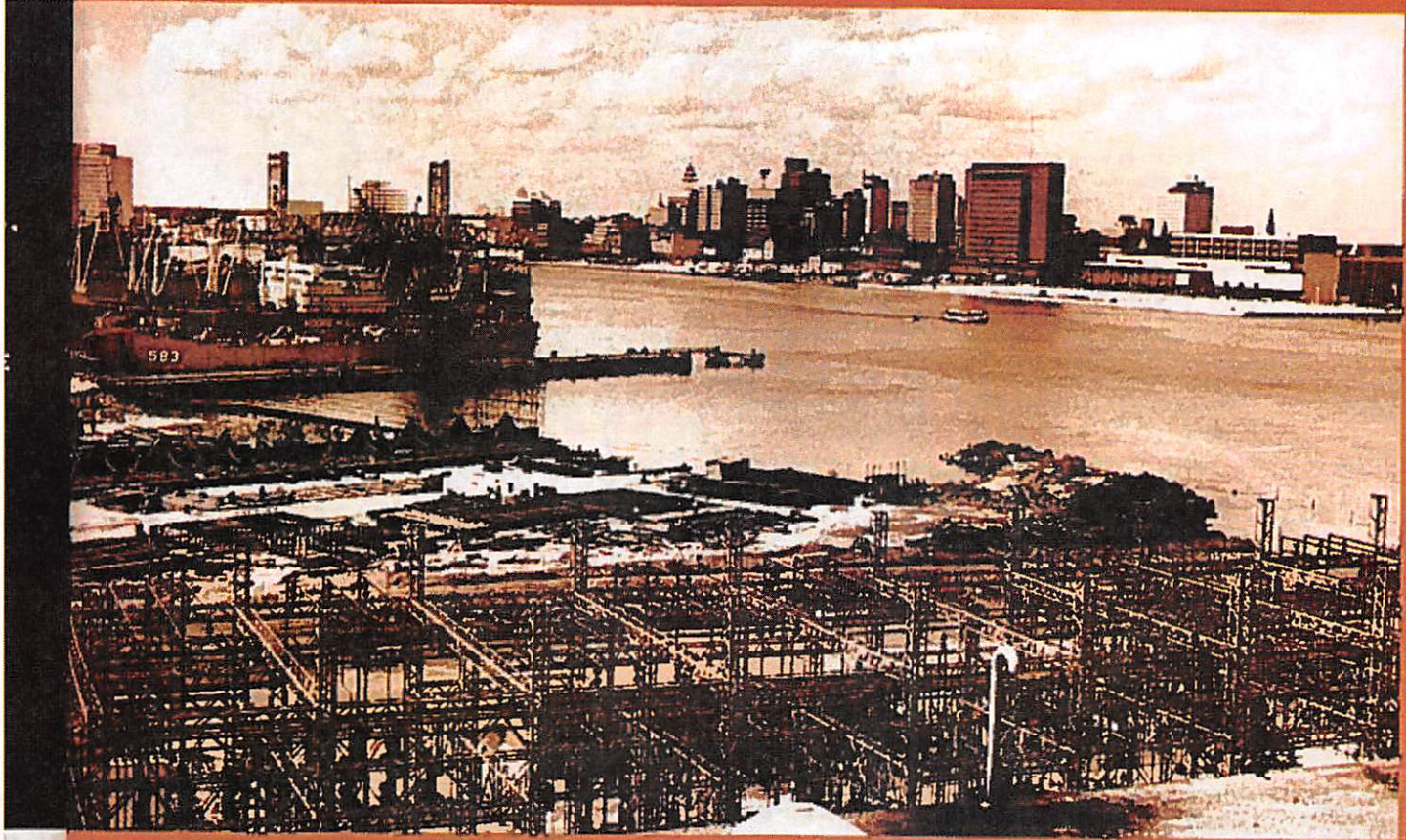
**PEACETIME
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THE SOUTH."**

Jacksonville's electric system serves again in World War II — In spite of new equipment, during World War II, the city electric system operated dangerously close to maximum capacity. To help out, the Navy loaned the city a 10,000-kilowatt mobile unit and the city was able to lease another, the 30,000-kilowatt Inductance that it kept even after the war ended.



high voltage interconnections, the creation of a Florida electric power pool and, just in case the Nazi subs in the Atlantic should interfere with the supply of oil, the construction of a 199-mile pipeline that safely brought oil from the Gulf coast to Jacksonville. ■ But in spite of the power boosts made possible by many improvements and a new boiler, the city electric system operated dangerously close to maximum capacity throughout the war. To help out, in October of 1944, the Navy loaned the city a 10,000-kilowatt mobile unit that had been at the Philadelphia Navy Yard. The loan was for only three months, but there were four other floating power plants — much in demand — and Jacksonville was able to lease one, the

30,000-kilowatt *Inductance*, for \$31,500 a month. Towed to Jacksonville, the *Inductance* went on line on April 14, 1945. ■ At last, Jacksonville had all the power it needed to meet the demands of its war industries. But just one month later, the war in Europe ended — a few months later, Japan surrendered. But the *Inductance* stayed; it was still needed; Jacksonville bought it. ■ Peacetime brought an end to most of Jacksonville's war industries, but not to the city's ambition to become "the metropolis of the South." ■ A variety of postwar projects were begun, one of the biggest involving the city's electric system. That was natural enough; air conditioning was beginning to cool Jacksonville homes and businesses. And an increasing portion of the city was to be found in



front of their new television sets. ■ The need for still more power led to a \$15 million plan that would upgrade the Talleyrand plant and create a new power plant, a 60,000-kilowatt plant on the southern side of the St. Johns River. ■ The Southside plant began producing power on Oct. 12, 1950, but the Korean War was already under way and the resurgence of military activity was again placing heavy demands on the electric system. ■ On Monday, Nov. 19, 1951, the electric system reached an all-time peak load of 151,000 kilowatts. That was dangerously close to the system's total capacity of 173,500 kilowatts — 66,000 kilowatts from the new Southside plant, 77,500 from the Talleyrand plant, and 30,000 still being generated by the floating power plant, the *Inductance*. ■ The city's electric system needed to be expanded again. Power plant additions in 1955 and 1958 raised Southside's capacity to 195,000 kilowatts and Talleyrand's to 188,000 kilowatts. In 1961, Talleyrand got its largest turbo-generator yet, a 100-foot-long, 134,000-kilowatt monster. It brought the system's capacity to 517,000-kilowatts. ■ And in 1962 a new \$63 million expansion program was launched. It would not only bring a 150,000-kilowatt generator to the Southside plant, it would build a new Northside plant. ■ But on June 28, 1964, a 140,000-kilowatt transformer at Talleyrand — the largest in the system — failed without warning. ■ The failure reduced the system's capacity to 400,000 kilowatts, far below the then-current demand of 500,000 kilowatts. And there seemed to be no quick fix. The giant transformer, weighing 125 tons, would have to be returned to the manufacturer for repairs.

The Southside Generating Station — The continuing need for more power led to a \$15 million plan that would upgrade the Talleyrand Avenue Light Plant and create a new power plant on the southern side of the St. Johns River. The Southside plant began producing power on Oct. 12, 1950.

Jacksonville votes for city-county consolidation on Aug. 8, 1967 — On Oct. 1, 1968, Consolidation Day, Mayor Hans G. Tanzler, Jr. and J. J. Daniel place a "time capsule" behind City Hall. It is scheduled for opening on Sunday, Oct. 1, 2000. Daniel headed the Study Commission whose work provided the blueprint for the consolidation of city-county government and an independent electric authority.

The new Northside plant goes on line Nov. 10, 1966 — Northside's 275,000-kilowatt steam-driven turbine generator increased the Jacksonville electric system's capacity to 942,000 kilowatts.



BUT THE CITY already had the new 150,000-kilowatt transformer that had been intended for Southside. Instead, it was trucked across the river to fill the vacancy at Talleyrand. The city electric department engineers and crews worked around the clock that Fourth of July weekend. Full service was restored at 11 a.m. on Monday morning, July 6. ■ While coal and natural gas were considered as fuels for the new

Northside plant, the decision was made to continue to use oil as the fuel. And an oil-fired steam generating unit was ordered for Northside. ■ Then, on Sept. 9, 1964, Hurricane Dora paid a visit to Jacksonville. The generating stations were unharmed but lines were, for the most part, down everywhere.

As soon as Dora's winds died down all of the electric department's 18 repair crews went to work. All told, 400 repair men, some from other cities, some from other states, were busy clearing lines, replacing poles, wires and transformers. Soon, about 50 percent of normal service had been restored. ■ But on Sept. 12 Dora made a U-turn — and delivered another blow to the city, lashing the area with heavy rains and winds of up to 65 miles an hour, knocking out service in many homes and businesses for the second time. ■ The electric department's repair crews now had more help, 180

repairmen from five local electrical firms. By Sept. 15, service had been restored to 80 percent of those who had lost it. Most service to the remaining 20 percent was restored on Sunday, Sept. 20. On Oct. 30, 1964, the 150,000-kilowatt Southside unit went on line, bringing system capacity to 667,000-kilowatts. ■ In the summer of 1966, a new seven-mile-long, 138-kilovolt, high voltage transmission system went into service; it would connect the new Northside generating station with the Florida electric power pool. ■ The Northside plant went on line on Nov. 10, 1966. Its 275,000-kilowatt steam-driven turbine generator increased the Jacksonville electric system's capacity to 942,000 kilowatts. ■ But there were problems. County population was growing while the city's was declining. The county's citizens had no voice, no vote in the city elections, no power over the city's electric system. They paid higher electric rates than those in the city and did not share in the electric system's annual contribution to the city's general fund. ■ And the city? It was governed by both the commission and the council. And the city had, for its size, the largest number of public employees and the highest monthly payroll in the nation. ■ There were other issues, of course, and they led to a county-wide referendum, on Aug. 8, 1967, that wound up almost 2-to-1 in favor of consolidating the city and the county. As part of the consolidation plan, the City and County Commissions were abolished and the City Electric Department became an independent authority, the Jacksonville Electric Authority (JEA). ■ The JEA's first seven-member appointed board felt it had a mandate from the people for a fresh approach to the electric system. The Board decided to reorganize the management of the JEA under a managing director. ■ Shortly after the change of government, the JEA's power stations got six 16,500-kilowatt gas turbine generators that could, in an emergency, begin generating power in 10 minutes versus the six-hour start-up required for steam-generated units.



On Sept. 9, 1964, Hurricane Dora paid a visit to Jacksonville... and returns — Service to about half the outages caused by Hurricane dora had been restored... when Dora made a U-turn, knocking out service to many for the second time. Some homes and businesses were without power for two, even three weeks.

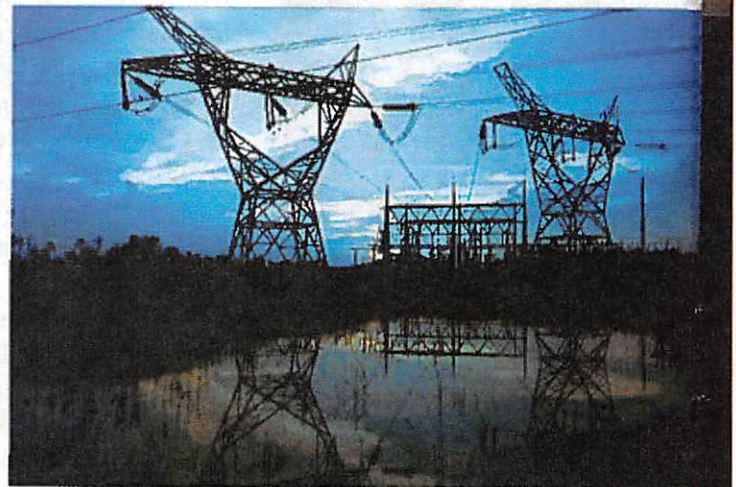
AS PART OF THE CONSOLIDATION PLAN, THE CITY AND COUNTY COMMISSIONS WERE ABOLISHED AND THE CITY ELECTRIC DEPARTMENT BECAME AN INDEPENDENT AUTHORITY, THE JACKSONVILLE ELECTRIC AUTHORITY (JEA).

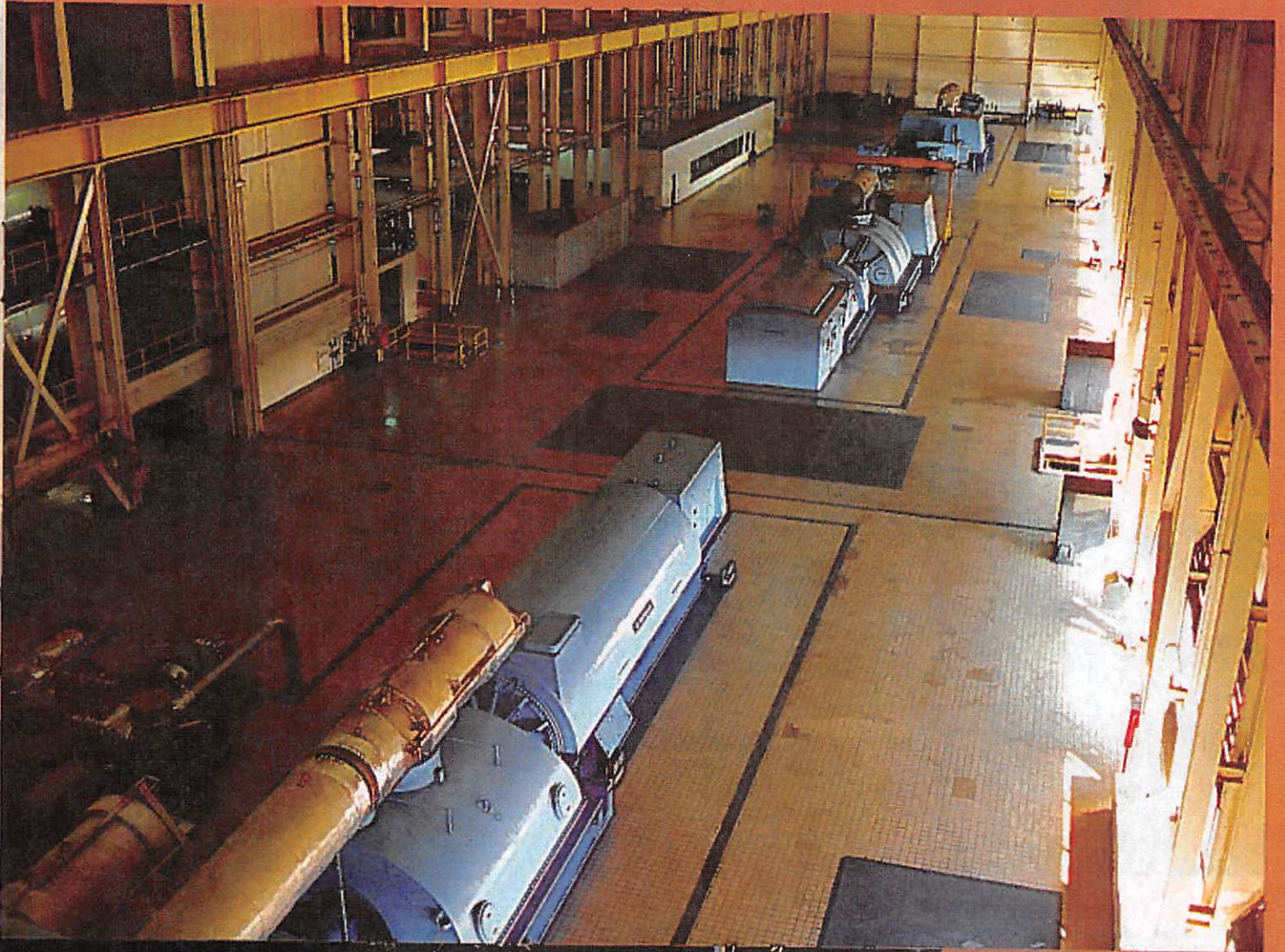
N

ORTHSIDE got another 275,000-kilowatt turbine generator in 1972. By 1976, a number of gas turbine generators had brought the system's total capacity to 1,548 megawatts, one megawatt being the equivalent of one million watts. In July of 1977, Northside's 518,000-kilowatt generator went on line, increasing the system's capacity to 2,066 megawatts. ■ At the same time, streetlights were being extended, new substations were being built, and miles and miles of transmission lines and distribution lines were being erected. But the cost of oil was increasing. The JEA had to buy higher-priced oil with a low sulfur content to reduce air emissions — and take other steps that added to the cost of the only fuel that the JEA's electric power plants could use. ■ Oil had been costing

about \$2 a barrel, but by 1972 the cost had increased to \$2.69 a barrel. And when the Organization of Petroleum Exporting Countries — OPEC — adopted a policy of price increases, the price of oil per barrel jumped to \$5.71 in 1973 and \$12 by late 1974. ■ Soon Jacksonville was paying top dollar for each barrel of oil it used — and was, of necessity, passing the cost on to the user in a fuel adjustment charge. ■ Then, because consumers were cutting back on their use of electricity, electric revenues fell — and the \$19.8 million contribution the JEA had made to the city in 1976 could not be expected in 1977. There was fear of a multi-million dollar "shortfall." Actually, JEA managed to contribute \$19.2 million in 1977. ■ Also in 1977, the Florida Legislature amended the Jacksonville municipal charter under a Sunset Law provision to automatically eliminate the city's independent agencies, one at a time, unless the City Council voted to retain them. ■ The JEA was the first scheduled for examination and possible elimination. Well ahead of the July 1, 1978 deadline, a select City Council panel voted in favor of the JEA and on March 28, 1978, in spite of the JEA's troubles, the full City Council voted to allow the authority to continue as an independent agency — until 1981, when the JEA would be re-examined. ■ But criticism continued, even though JEA's annual contribution to the city in 1978 was some \$23 million. Electric bills were higher — but so was electrical consumption, three times higher in 1978 than in 1951. In 1979, rate increases because of rising oil prices made JEA rates the highest in Florida. ■ But the two coal-fired units that the JEA and Florida Power and Light Company (FPL) had been planning were taking shape. The JEA was also working aggressively to secure needed regulatory approvals to burn natural gas. And the JEA began importing coal-fired power from Georgia over FPL transmission lines. ■ The coal-fired plant, to be known as the St. Johns River Power Park (SJRPP), would largely be owned by the JEA, but the JEA and FPL would share the plant's output through the joint ownership contract. Having two units would allow one unit to continue to produce power while the other was shut down for repairs. ■ In 1980, another OPEC increase in the price of oil boosted the JEA's rates to among the highest in the nation. In response, the JEA pressed hard for the construction of another transmission line that would allow JEA to increase the amount of low-cost, coal-fired power it was importing from other utilities.

But the oil that Jacksonville needed was getting scarce and expensive — OPEC, the Organization of Petroleum Exporting Countries, raised the price of oil. The JEA which was totally dependent on oil, began importing coal-by-wire. Soon, the JEA and FPL decided to build additional lines. These two 500 kV transmission lines, completed in 1982, allowed the JEA to import an additional 1,000 megawatts of coal-generated power, a blessing at a time the price of oil went to \$35 a barrel.





**SOON
JACKSONVILLE
WAS PAYING
TOP DOLLAR
FOR EACH
BARREL OF OIL
IT USED.**



Northside gets massive new generators — In 1972, Northside got a second 275,000-kilowatt generator. In 1977, a 518,000-kilowatt generator. Both generators, like all the generators in the Jacksonville electric system, burned oil. Trouble was, the price of oil rocketed from \$2 a barrel to many times that.

The JEA makes it possible for all of its generating stations to burn natural gas as well as oil — Beginning in 1983, the JEA began adapting its generators to burn natural gas as well as oil and built gas pipelines to all of its generating stations. Another way to bring rates down.

E

ARLY IN 1981, a second select panel was studying whether or not the JEA should be terminated under the Sunset Law. The deadline: July 1, 1981. The vote, held the day before, again kept the JEA intact as an independent agency of the city. This, in spite of the fact that oil was now costing \$34.97 per barrel. ■ Another plus. The JEA had negotiated a mutually acceptable final contract with FPL for the St. Johns River Power Park. There were still hurdles ahead. City Council approval. Approvals were also needed from the federal Environmental Protection Agency (EPA). ■ The estimated cost of the project? \$1.5

billion. It would include not just the coal-fired units, but railroad cars to cost-effectively haul coal to the Power Park, a coal port on the river with a covered conveyor to bring the coal to the plant, and contracts for the coal itself — delivered both by land and sea. ■ Meanwhile, JEA rates had been dropping until they were again among the lowest of other Florida utilities. The 500-kilovolt transmission lines helped. The first line was completed in April 1982; the second, early in 1983. The JEA's membership in the Florida Electric Power Coordinating Group's energy broker system allowed it to buy any power that was available in the state when it was at a lower cost than the JEA could generate on its own. ■ Following the groundbreaking on Dec. 1, 1982, construction started on a 1,600-acre site for the St. Johns River Power Park (SJRPP). At the peak of the construction period more than 2,200 workers were employed on the project. The total payroll amounted to nearly \$370 million. ■ When Unit 1 and Unit 2 at SJRPP were declared ready for commercial operation, on March 27, 1987 and May 27, 1988, the project was four months ahead of schedule and \$200 million under budget. ■ What's more, both units were producing 624 megawatts each. That's 148 megawatts more than projected —

**BURNING
COAL IS A
MAJOR
MONEY-SAVER
FOR JEA
CUSTOMERS**



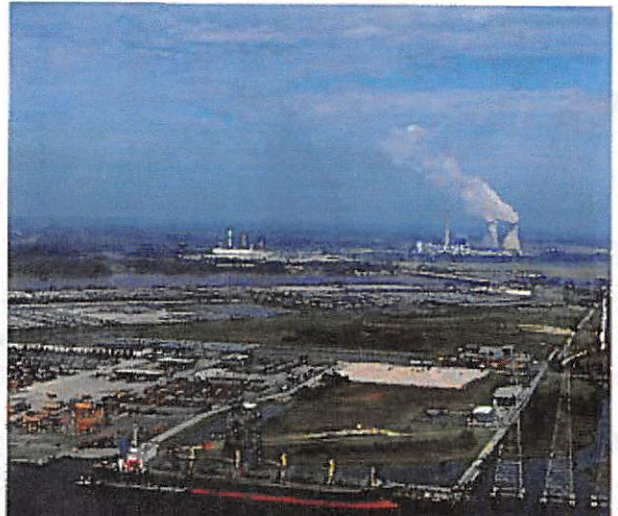
SJRPP was four months ahead of schedule and \$200 million under budget — Ground was broken for the St. Johns River Power Park in 1982. As many as 2,200 workers were involved in its construction. The first unit at SJRPP was declared ready for commercial operation on March 27, 1987; the second ready on May 27, 1988. By burning coal instead of oil, SJRPP is a major money-saver for the JEA's customers.

worth an additional \$200 million in avoided cost. ■ And when the St. Johns River Coal Terminal went into operation the JEA was able to get its coal by either rail or ship, whichever cost less. And because the boilers at SJRPP were designed to burn a wide range of coals, the JEA has a wide choice of suppliers. ■ But SJRPP wasn't the JEA's only effort to use the most economical fuel. During SJRPP's construction, the JEA had been adapting its other generators to burn natural gas in addition to oil. The JEA now had its choice of many fuels, as well as purchased power from many sources, and the option of choosing whichever was the least expensive. ■ With the completion of the System Operations Control Center (SOCC) in 1988 with the latest computers monitoring the flow and cost of power, Jacksonville was more capable than ever of using the lowest-priced power available. ■ In 1991, the JEA also purchased a 150-megawatt share of an existing Georgia Power Company coal-fired generating unit — and then increased its share to 200 megawatts in 1995.

The JEA buys an interest in Unit 4 at Georgia Power Company's coal-fired Plant Scherer — In fiscal 1991, the JEA bought an initial 150 megawatt interest in Unit 4 and this year, fiscal 1995, purchased an additional 50 megawatts.

The St. Johns River Coal Terminal (SJRCT) — This coal terminal allows the JEA to buy coal-by-ship as well as coal-by-rail. Even the boilers at SJRPP save money; they'll use a wide range of coals so the JEA has a wide range of suppliers.

The JEA's System Operations Control Center (SOCC) is completed in 1988 — SOCC allows the JEA to buy or sell power whenever it's to the JEA's advantage. The Control Center's computers are linked to the Energy Broker Network and the new Automated Interchange Matching System (AIMS). Both are brokerage systems that allow SOCC to purchase power whenever the price is less than the cost to the JEA of producing it.



M

MUCH PROGRESS HAS BEEN MADE in the JEA years. ■ A portion of the page 4 letter from the Authority Chairman and the Managing Director bears repeating: ■ "In fiscal year 1995, JEA added 6,393 new customers, sold a record high 9.9 billion kilowatt hours (kwh), an increase of 6.1 percent compared to the previous year, and recorded \$615 million in total operating revenues." ■ While JEA's cus-

tomers, sales and revenues have been steadily growing, so has the productivity of JEA's employees. ■ For example, in 1980 there were 234 customers per JEA employee; in 1995, that ratio of productivity had increased 53 percent to 357 customers per employee. ■ The JEA has been growing in assets, too. In the last 25 years, for example, the JEA has added: over \$95 million worth of transmission lines; in excess of \$407 million worth of distribution lines; and over \$122 million worth of substations. ■ But the JEA, like the electric system when it was a city department, has also been contributing to the city's general fund. In the first 50 years, the electric system's annual contributions to the city's general fund totalled \$33.61 million. In the next 25 years, \$225 million. And in the last 25 years — the JEA years — \$764 million. ■ Yet today, at the end of fiscal year 1995, the JEA's electric rates are again among the lowest in Florida — and the nation. And the JEA aims to keep them that way...for the next 100 years.



At 6:40 p.m. on March 7, 1995, we re-created 100 years ago — Hundreds of JEA employees and retirees gathered at the Jacksonville Landing to watch four ceremonial street lights being lit — at the exact time that the lights had been turned on at the Main Street Light Plant 100 years ago. And "Big Jim," the historic steam whistle that had blown when the lights first went on, blew again — This time "Big Jim" blew for 100 seconds, one second for each year of municipal electrical service. "Big Jim," originally stationed at the Main Street Light Plant, is now located at the Southside Generating Station where it continues to tell Jacksonville what time it is, four times a day.

