

# COBB

# WEADOCK

Celebrating a legacy of energy, people and community

WHITING



Muskegon Lighthouse



Tall ships on the Saginaw River in Bay City



Luna Pier Beach

THIS book is dedicated to our hard-working employees and the communities that helped the Cobb, Weadock and Whiting plants flourish for decades.

Each day, employees brought their best to work, sometimes under challenging conditions, to serve our customers.

We cherish our relationship with Muskegon, the Bay area and Luna Pier, and appreciate the countless people who supported our operations through the years.

Our plants were woven into the fabric of daily life in each of these places. Together, we produced the affordable, reliable electricity that helped power Michigan's progress and innovation for more than 75 years.

That bond will last well beyond the plants closing their doors for the final time. We worked closely with local stakeholders in each community to identify and meet challenges related to the retirement of the plants.

Consumers Energy is proud to have served Muskegon, Hampton Township, Luna Pier and the surrounding areas.

We are leaving it better than we found it.

Thank you.



"During my 34-plus years at the Cobb Plant, I worked at and trained operators on all five units. I saw the units upgraded from manual switches to computerized controls. I spent a lot of my life in the plant. We always did our best to accommodate power control when needed. I was always proud to work there. It was a reliable plant and a good place to work."

Art Cisler Retired Plant Operator and Training Instructor

COBB320
320

"It's a bittersweet moment to be the last local union president representing Cobb employees. It's always been a family atmosphere. Cobb has been the backbone of the community. It's been an honor and a privilege to represent the operation and maintenance workers. It's also been a pleasure to see Cobb end on a high safety note and to work with management on the closing in a safe, responsible manner."

Dean Smith Utility Workers Union of America Local 103 President

# Without Consumers Energy and Weadock, 310 megawatts

Hampton Township wouldn't be what it is today. We couldn't have asked for a better neighbor. The plant provided a good tax base that enabled the township to put together fire and police departments, install water and sewer lines, create a Department of Public Works, build offices and a great educational system."

Terry Spegel Retired Hampton Township Supervisor "I am a 36-year Karn/Weadock employee with over 17 of those years at J.C. Weadock. How lucky I am to have had something that makes saying goodbye so hard. What we had at Weadock is hard to find, difficult to leave and impossible to forget. I am grateful to have had it as part of my life."

Tammy Asel-Templin Senior Engineer/Scheduler I, Karn

### WY ITH HINGS 328 megawat

"The city of Luna Pier would never have been able to incorporate if it hadn't been for Consumers Energy. The tax base the company provided since the Whiting Plant was built over 60 years ago supplied the city with water and sewer lines, roads and the amenities we have today."

> David Davison Luna Pier Mayor

"Leaving it better than we found it; J.R. Whiting has been doing this since commercial operation in 1952. Everyone who has passed through these doors has improved because of their time at the site and all that it represents and what we have made of it. Like an old friend, Whiting will be missed. But Whiting will leave us better than it found us."

Harry Redford Plant Electrician

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Thank you for your many decades of outstanding service

Our Cobb, Weadock and Whiting Plants have reached the finish line after decades of generating electricity for our customers around the clock.

April 15, 2016, marks the end of an era for our pioneering coal-fired plants that started powering homes and businesses between 1940 and 1952. They provided essential electricity for homes and businesses and improved our customers' quality of life.

We affectionately nicknamed the last operating units — Cobb Units 4 and 5, Weadock Units 7 and 8, and Whiting Units 1, 2 and 3 — the "Classic Seven." They've played a significant role in our company's history since the 1950s, and set a standard of excellence for our company and the industry.

We're proud of our employees' determination to operate the plants safely, efficiently and productively for so many decades, including the final days leading up to retirement. In fact, Whiting's Unit 3 set a company record by operating continuously for 679 consecutive days. That's testament to the spirit and outstanding work ethic of our employees.

Classic Seven employees created an inclusive culture where all employees were respected and valued. They've worked hard to contribute their personal best every day. For many, the plant was a second home where employees formed a close-knit extended family.

The Cobb, Weadock and Whiting plants were a visible part of our energy landscape. They leave a legacy of award-winning safety, environmental and production performance, and of employees who selflessly volunteered their time and talent to make their communities better places to live and work.

On behalf of our company and our customers, we offer thanks to our Classic Seven employees and retirees for many decades of outstanding service to Michigan.

John Russell

Consumers Energy

President and Chief Executive Officer

**Dan Malone** 

Consumers Energy

Senior Vice President of Energy Resources



Consumers Power President 1915–1932

Board Chairman 1930–1934

Director 1911–1934



BERNARD "BURT" CAPEN COBB was the first president to succeed Consumers Power founder William A. Foote.

Born in Boston, Cobb was the son of a minister whose ancestors came to America on the Mayflower ship. A polished gentleman with a passion for honesty, neatness and manners, Cobb's trademark attire was a three-piece suit with a vest edged with white piping and a tie with a pearl stickpin.

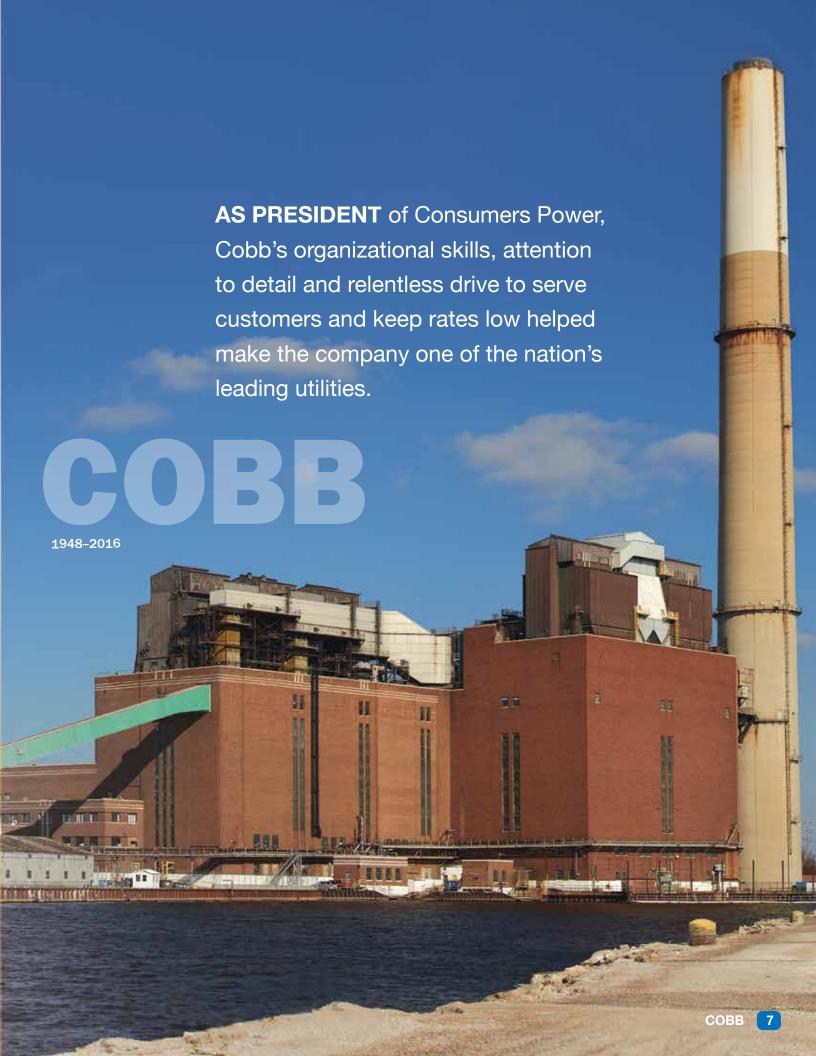
After graduating from Phillips Academy in Andover, Mass., Cobb worked at entry-level jobs in the railroad and utility industries, eventually working his way up to vice president. He then made his way to New York, where he became a Wall Street investment banker engaged in building, operating and financing electric utilities.

Cobb was a well-respected, astute businessman and a master of finance. By 1929, he had consolidated 165 separate utilities in 11 states into a billion-dollar holding company named Commonwealth & Southern Corp. Consumers Power was the corporation's largest affiliate and the biggest revenue producer.

As president of Consumers Power, Cobb's organizational skills, attention to detail and relentless drive to serve customers and keep rates low helped make the company one of the nation's leading utilities. He successfully led the company through World War I, the Roaring '20s and the onset of the Great Depression.

Cobb retired in 1934 at the age of 64. He died in 1957 at the age of 87.





NEARLY SEVEN DECADES,
Muskegon was home to the Cobb
generating plant. Located on 300 acres
just over a mile from Lake Michigan on the shores of
Muskegon Lake, the 320-megawatt plant was a familiar
landmark. Cobb's stack — the tallest structure in Muskegon
County — towered 650 feet above ground and was a welcome
beacon to travelers on land and water.



In January 2016, Cobb employees invited the community to tour the plant before it closed. Led by veteran employees, nearly 400 people discovered the wonders of electric generation, which had helped power their homes and businesses since 1948.

Like a family, the Cobb crew celebrated birthdays, service anniversaries and plant achievements. From picnics on the plant lawn to retirement dinners at nearby restaurants, they turned out to support fellow "Cobbers" and the community where they lived and worked.

Whether working hard at their jobs, improving the environment or participating in community activities, Cobb employees showed they cared.



Community members toured the Cobb site in January 2016.





New stainless steel guardrails on the stack improved safety.

operating costs and emissions to meet more stringent federal standards.

As Western coal was more volatile at certain stages of the generation process, employees adjusted equipment and modified systems to safely burn the new fuel source. They set the standard for the company's coal-fueled fleet, which converted to burn a blend of 80 percent Western and 20 percent Eastern coal.

Throughout 2015, Cobb employees worked without a lost-time injury.

#### Safety First



#### **SAFETY WAS PARAMOUNT AT**

COBB, where its employees mastered the skills of working safely with electricity, industrial equipment, extreme heat and pressure. They operated with the philosophy that going home safely at the end of their shift was the best gift they could give their families. Their safety ethic helped Consumers Energy win the National Safety Council's top annual award many times.

Over the years, employees met numerous challenges, but their mission remained unchanged: to safely provide reliable, affordable electricity to customers every day.

In the 1980s, the boilers at Units 4 and 5 (which were built to burn Eastern coal) were modified to burn a mix of low-sulfur Western coal and Eastern coal. The change reduced

## Powerful Performance

#### THE COBB PLANT WAS ONCE POWERED BY FIVE TURBINES.

The first three units were mothballed in 1990, repowered using natural gas in 1999-2000, then permanently retired in 2015. Units 4 and 5, which began operating in 1956 and 1957 respectively, each produced 160 megawatts of electricity, enough to serve a community of approximately 300,000 people.

## Environmental Excellence

#### VOLUNTEERING DURING EVENINGS AND ON WEEKENDS.

the men and women at Cobb worked with the Michigan Department of Natural Resources to erect 50 bluebird and 200 wood duck nesting boxes and help manage the rare peregrine falcons nesting on the plant's stack.

They formed partnerships with the Muskegon County Nature Club, Muskegon County Duck Hunters Association, city of Muskegon Leisure Services Department and Wildlife Habitat Council.

Their environmental work included:

- Instituting nest-monitoring programs for Eastern screech owls, purple martins and house wrens
- · Developing a butterfly garden
- · Planting meadow grass
- Maintaining a public path for nature study

"Having worked at Cobb for over 37 years, I had the opportunity to work with and get to know so many wonderful employees. What I found at Cobb I will never find anywhere else in our company — the camaraderie that exists between every employee who ever worked there. When this plant closes, so will a chapter in my life. My grandfather, Louis Oswald, helped build the plant in 1948, working his entire career there, so Cobb has been a part of my entire life. I will never forget the Cobbers."

Debi Krueger
Business Support Advisor II
Human Resources, Grand Rapids

A successful nesting program for peregrine falcons was one of many environmental initiatives at the

Cobb Plant.

- · Planting wild rice for ducks
- Constructing an outdoor observation platform for visitors

Employees also continually monitored and analyzed the air, water and soil to ensure the plant met state and federal requirements.

# Caring for Community

COBB EMPLOYEES WERE AN ESSENTIAL PART OF THEIR COMMUNITIES. They supported United Way and volunteered for the Michigan Department of Transportation Adopt-a-Highway program, American Heart Association Go Red for Women, Angel Tree Toy Drive, Community Action Agency Walk for Warmth, and Muskegon YMCA's Corporate Cup battle of businesses.

Employees and retirees served as youth coaches, mentors and leaders. They were athletic and music boosters. They earned grants for the nonprofits they volunteered for from the Consumers Energy Foundation. They strung Christmas lights along Veterans Memorial Park on the Muskegon Causeway and the plant donated lights and electrical work.

Cobb employees contributed significantly to the local economy by shopping locally and paying property taxes. The plant hired local contractors for routine maintenance and bought materials and supplies locally.

Over the years, Consumers Energy paid millions of dollars in property taxes to the city of Muskegon, Muskegon County and local schools. The company also paid the Muskegon County Wastewater Facility for fly ash disposal.



# By the Numbers

**300,000** Approximate number of households served

300 Acres of land

320 Megawatts generated

**780,000** Tons of coal burned each year (delivered by freighter)

350 Million gallons of water passed through each day

650 Height in feet of the stack

1948 Units 1 and 2 began operating

1950 Unit 3 began operating

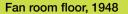
1956 Unit 4 began operating

1957 Unit 5 began operating

\$4 million Property taxes paid in 2014

**\$10.5 million** Cost to build Cobb Units 1 and 2 in the 1940s







Breaker house, 1949

"United Way of the Lakeshore enjoyed the wonderful partnership with labor and management at the Consumers Energy Cobb Plant. Throughout the years, they have run successful best-practice workplace campaigns to raise funds to support the needs of the community and have engaged as volunteers on a number of worthwhile projects. We are thankful for the vital role Consumers Energy has and will continue to play as one of our top supporters."

Christine Robere President and CEO United Way of the Lakeshore



Raising of the flag by American Legion Color Guard at Cobb Plant dedication, April 1949.

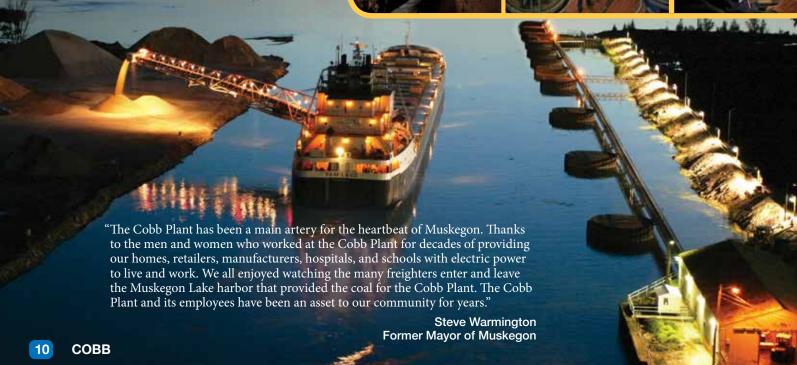
"I never planned to stay at Cobb for 40 years. I stayed because I loved the location, enjoyed the people, had challenging and different jobs and never tired of working there. I couldn't have asked for a better place to start and end my career."

Alan Coombs Production Lead/Engineer















Pouring concrete, 1968



Unit 4 generator replacement, 2005





"I enjoyed working at Cobb and being able to learn so many different aspects of the business. With a small workforce, we had a lot of opportunities to learn new things and do different jobs. What I'll miss most when the plant closes is the daily interaction with the other employees. Without people, this plant would not have run for over 60 years. People are the most important aspect of the business."

> Janet Zondlak Chemistry and



#### **AWARDS**

1991-2015: The Cobb site was certified each of these years by the Wildlife Habitat Council for its careful and responsible stewardship of land and natural resources by erecting nesting boxes for birds, developing a butterfly garden and wildflower meadow, and planting spruce trees.

1997: Cobb employees received a National Safety Council Award of Commendation for its excellent safety performance in 1996.

1998-2004: Cobb was recognized each of these years by the Michigan Department of Environmental Quality (MDEQ) and the Michigan Department of Natural Resources and Environment (MDNRE) with membership in the Michigan Business Pollution Prevention Partnership for its voluntary pollution prevention efforts.

2000: Cobb employees received a National Safety Council Award of Commendation for working without a lost-time injury in 1999.

2006: Cobb received the Environmental Excellence Award from the Michigan Association of Environmental Professionals for erosion control methods that enhanced habitat for local wildlife.

2007-2010: Cobb received the Clean Corporate Citizen (C3) designation each of these years from the MDEQ.



#### **ACHIEVEMENTS**

1988: Cobb was the first company coal-fueled plant to test and burn lower-cost, lower-sulfur Western coal.

2003–2015: Peregrine falcons annually raised their young in a nesting box on the plant stack more than 200 feet above ground. It was only the second known nesting site for the rare birds on the Lake Michigan shoreline.



AN INFLUENTIAL ATTORNEY AND FOUNDING FATHER OF THE COMPANY, John Cullen Weadock brokered a 1910 deal to form a holding company under Maine laws that created Consumers Power. (Consumers Power was incorporated in Michigan in 1968.)

A company "kingmaker," Weadock used his powerful influence to help Bernard Capen Cobb and Justin Rice Whiting ascend to the presidency of Consumers Power. He also was instrumental in naming Wendell Willkie chairman of Commonwealth & Southern Corp., the holding company for Consumers Power, and to the utility's board of directors from 1929 to 1940.

The youngest of seven sons born to Irish immigrants, Weadock was born in St. Marys, Ohio, and grew up on his parents' farm there and in Bay City, where his family moved when he was a teenager. He briefly taught school and worked aboard a Saginaw River steamboat, tossing drunken lumberjacks overboard, a task made easier by his burly 6-foot frame. He then joined the Bay City law firm of his older brother, Thomas.

Largely self-taught, Weadock quickly succeeded, becoming the city attorney. He later moved to New York, where he became one of the most prominent attorneys on Wall Street.

The outgoing and likeable Weadock had a large circle of friends and was known for his down-to-earth spirit, keen intelligence and analytical mind. He also had a reputation for honesty, respecting others and being a good judge of people.

Weadock died in 1950 at the age of 90.



1940-2016

# WEADOCK

A COMPANY "KINGMAKER," Weadock used his powerful influence to help Bernard Capen Cobb and Justin Rice Whiting ascend to the presidency of Consumers Power.



J.C. WEADOCK GENERATING
PLANT stood at the mouth of the
Saginaw River along the shoreline of
Saginaw Bay and began churning out electricity in 1940 —
the year before the United States entered World War II.

Saginaw Bay

Weadock Plant

Saginaw River

Essexville

Bay City

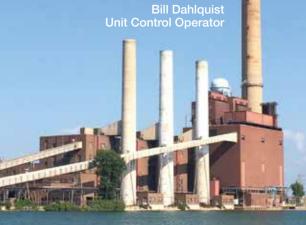
The oldest of Consumers Energy's coal-fired facilities, Weadock's stacks stood like sentinels near the water's edge, serving as landmarks for boaters and fishermen for more than seven decades.

In response to the Saginaw Valley's rapid growth and booming market for electric-operated appliances in the 1950s, Units 7 and 8 entered service, joining Weadock's original six coal-fired units.

All eight units operated until 1980, when the first six units, which were converted in the 1970s to burn oil and operated as peaking units, were retired. Units 7 and 8 continued to operate until they retired in 2016, burning a blend of Western and Eastern coal to produce up to 310 megawatts of electricity, enough to serve approximately 300,000 households.

In 1959, the Dan E. Karn Generating Plant also started serving customers at the Weadock site, which became known as the Karn/Weadock Generating Complex.

"It was like a family here. We looked out for each other. We spent more time here than we did with our own family. It's sad to see the plant go. It will be different when we use the river without the old girl standing watch over the bay. A lot of boaters used the stack for a landmark to find the mouth of the river, me included."



"Weadock was always a good place to work. It was a good bunch of people who took ownership in the plant and were proud to do the work they did."

> Bill Johnson Production Supervisor



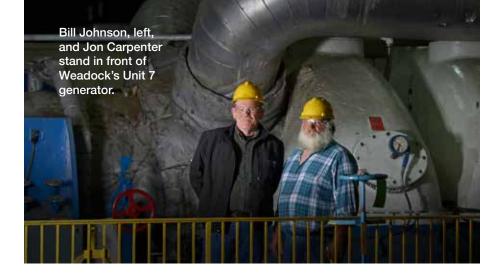
No matter what their job, employees focused on safety first so they all could return home safely after their shifts.

#### Safety First

#### AT WEADOCK, EMPLOYEES BECAME LIFELONG FRIENDS

who looked out for each other the same way they looked out for their families. They embraced the philosophy that returning home safely at the end of the day was the best gift they could give their families and co-workers.

Despite the inherent dangers of unloading and moving coal, and working with extreme heat, pressure and electricity, Weadock employees won several company awards for safe work performance and helped Consumers Energy earn awards from the Edison Electric Institute and National Safety Council.



### Powerful Performance

#### **WEADOCK EMPLOYEES TOOK**

PRIDE in the plant's performance as one of the most efficient generators of electricity in the nation. Whether a chemist checking for fuel composition, an operator in a control room or a mechanic maintaining a boiler, workers gave their best to provide a product essential to modern life.

Weadock required daily attention to maintenance of heavy equipment, coal hoppers and crushers, burners, and miles of boiler and steam pipes. Regardless of the task, employees worked safely and efficiently.

Like proud parents, employees could recite Weadock's record achievements by heart, such as when Unit 7 ran for 305 consecutive days in 2003 and Unit 8 operated for 275 consecutive days in 1989.

## Environmental Excellence

WEADOCK EMPLOYEES HELPED

LOCAL WILDLIFE co-exist with power production. More than 300 types of trees, plants, animals and fish thrived at or near the site, which was certified by the Wildlife Habitat Council for nearly a decade.

Stately egrets, great blue herons and black-crowned night herons stalked the site's 285 acres of wetlands while canvasback ducks paddled about. Employees installed bluebird and duck nesting boxes on the site's



ponds. Meanwhile, fish deterrent nets and permanent oil booms protected fish from harm.

The site's raptor rehabilitation flight pen was a key project. Built in 1993, the flight pen allowed injured birds to recover until they were ready to return to their natural environment. Hundreds of birds of prey such as bald eagles, falcons and hawks were rehabilitated at the site by the Essexville Wildlife Support Team.

In a joint effort to protect bald eagle habitat in the Saginaw Bay Watershed, plant employees and the U.S. Fish and Wildlife Service installed a bald eagle nesting platform on the north side of the Weadock site.

In addition to protecting and preserving the environment, employees continually monitored and analyzed the air, water and soil.

# Caring for Community

WEADOCK'S EMPLOYEES TOOK PRIDE in contributing to their communities. They served on many

charitable, government, civic and sports groups, including:

- · Bay Area Community Foundation
- · Essexville-Hampton Schools
- · United Way of Bay County
- Bay Area Chamber of Commerce
- Hampton Township Board of Trustees
- Bay County Emergency Response Team
- · Lions and Rotary clubs
- Little League
- Saginaw Bay Walleye Club
- Bay Habitat for Humanity
- Saginaw Valley Naval Ship Museum

To further support worthwhile organizations and activities, employees and retirees earned grants from the Consumers Energy Foundation for eligible nonprofits for which they volunteered.



Consumers Energy and Weadock employees helped strengthen the local economy through taxes that supported schools, safety, public service agencies and other governmental activities for more than 75 years. The Weadock Plant also purchased a variety of goods and services from local businesses.

"I worked at Weadock for 12 years. It was a close family atmosphere where everyone helped each other. We did everything together: celebrated weddings, anniversaries, birthdays. We became friends at work and outside of work. My heart lies in Weadock."

Tammie Keyes Senior Technical Specialist, Karn

# By the Numbers

**300,000** Approximate number of households served

**2,400** Acres of land shared with the Karn generating plant

310 Megawatts generated

 Million tons of coal burned each year (delivered by rail and freighter)

245 Height in feet above ground of the three Unit 1-6 stacks

500 Height in feet above ground of the stack serving Units 7 and 8

1940 Unit 1 began operating

1955 Unit 7 began operating

1958 Unit 8 began operating

**\$773,630** Property taxes paid in 2014



Discharge duct, 1948



Boiler, 1950





"The things Consumers Energy and the Weadock Plant did to improve the Bay area were phenomenal. The leaders of the Weadock Plant went above and beyond to develop the economy of the area and did everything they could to make it a positive area for residents and visitors."

> Mike Seward Former President and CEO Bay Area Chamber of Commerce





Pulverizer mills, 1950

Turbine room excavation, 1952



"My entire Consumers Energy career (39 years) was spent working at the J.C. Weadock Plant. Working there afforded me the ability to raise my children and to gain skills and an education that will last throughout my lifetime. When I retired in 2014, it was a bittersweet moment for me. I gained a wife and some lifelong friends there. Not being able to ride by and see 'old JC' is going to take some getting used to."

Joseph Jordan, Jr. Retired Journeyman Millwright

"I started working at Weadock as a co-op student when I was 17 years old. It was a stepping stone to my 36-year career at Consumers Energy. The older employees helped me and made me feel a part owner. We were all family. I hope now through my many years of service I can help the next generation. It truly was a blessing I got to stay there. I wouldn't have what I have today without Weadock and Consumers Energy."

Debbie Lupo Contract Analyst Generation Supply Chain

# NEADOCK STEAM PLAN

#### **AWARDS**

**1991–2010:** The Karn/Weadock site was certified each of these years by the Wildlife Habitat Council (WHC) for its careful and responsible stewardship of land and natural resources, protecting and preserving wildlife and working with environmental groups.

**2006–2010:** Karn/Weadock received the Clean Corporate Citizen (C3) designation from the Michigan Department of Environmental Quality (MDEQ) each of these years for efforts in environmental management systems, pollution prevention practices and strong environmental compliance records.

**2006–2012:** Karn/Weadock was recognized by the MDEQ each of these years with membership in the Michigan Business Pollution Prevention Partnership for its strong community relationships and voluntary pollution prevention efforts.

**2010:** Karn/Weadock received special designation from the WHC for its Corporate Lands for Learning Program.

**2010:** Karn/Weadock was honored with the Large Employer of Veterans Award by the American Legion Department of Michigan. Nearly 25 percent of the plants' 370 employees were veterans.

#### **ACHIEVEMENTS**

**1989:** Weadock Unit 8 set a unit record by running for 275 consecutive days.

**1990–1997:** A walleye rearing pond on the Karn/Weadock site raised 5,000 fingerlings released in Saginaw Bay.

**2003:** Weadock Unit 7 set a unit record by operating for 305 consecutive days.

**2008:** Karn/Weadock employees and the U.S. Fish and Wildlife Service installed a bald eagle nesting platform on the north side of the site to encourage nesting near the mouth of the Saginaw River at Windy Point. Bald eagles continue to nest there.

"The Weadock Plant was not just a building that we worked in; we felt we were the 'caretakers' of the plant. The employees all worked together, looking out for one another, day in and day out."



#### Justin Rice Whiting 1886–1965

Consumers Power President 1941–1951

Board Chairman 1940–1941 and 1951–1956

Director 1934–1938 and 1940–1965



JUSTIN RICE WHITING WAS BORN AND RAISED in Port Huron. One of 10 children, his father was a Democratic state senator. After graduating from the University of Michigan Law School, he worked as an independent attorney, handling a significant amount of legal work for Consumers Power.

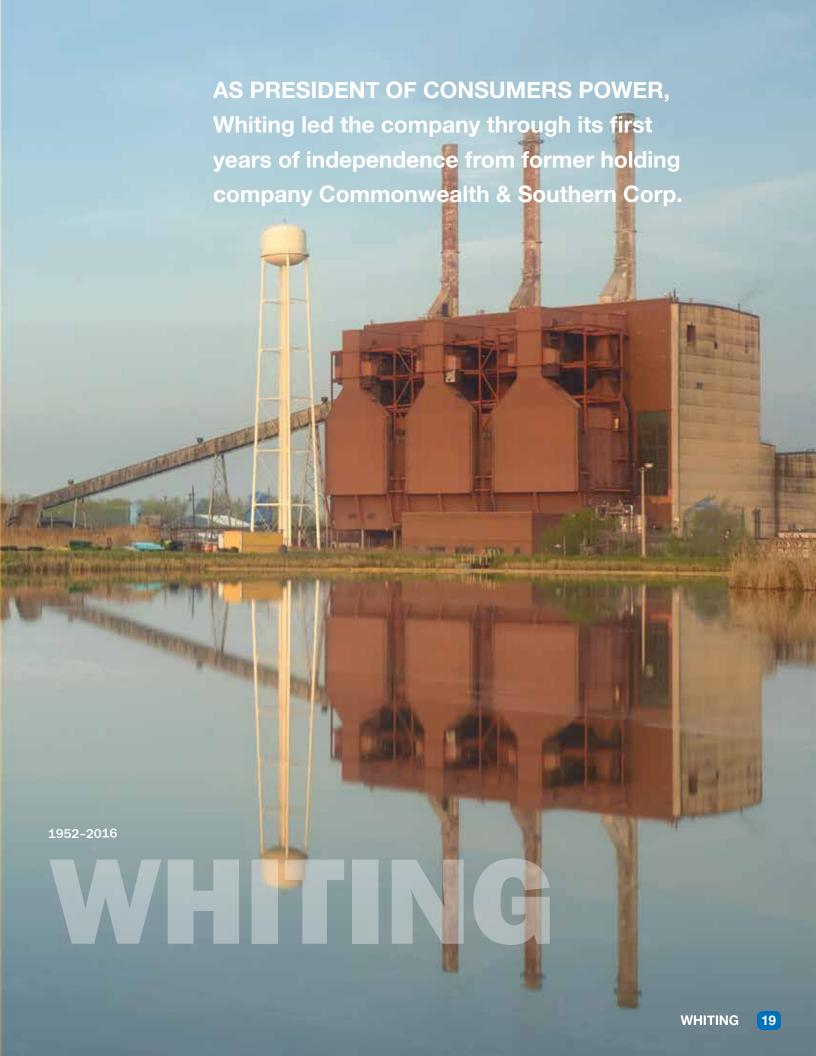
A quiet, orderly man who was a stickler for details, Whiting exemplified the highest ethical standards, basing his decisions on what was best for the company, not for his legal firm. Impressed by Whiting's honesty, John Weadock, a Wall Street attorney and founding father of Consumers Power, hired him as his law partner.

Whiting proved to be the right man for the time. As president of Consumers Power, he led the company through its first years of independence from former holding company Commonwealth & Southern Corp. He oversaw the rapid growth and successful expansion of the utility in the post-World War II era.

At the 1952 dedication of the Whiting Plant, Whiting said: "As the kilowatts that are generated here alternate throughout the system, may I express the wish that ... they make their contribution to our civilization."

A former president of the Michigan Bar Association and resident of Jackson, Whiting was committed to his community. He organized the Jackson United Hospital Foundation, which improved local medical facilities, and championed the need for a community college. Justin Whiting Hall at Jackson College was named in his honor.

Whiting retired in 1956, but remained a director until his death in 1965 at the age of 78.



### A CAREFULLY MAINTAINED CLASSIC CAR, the Whiting

Plant purred along the shores

of Lake Erie in Monroe County for 64 years. The 328-megawatt, coal-fired plant produced enough power for approximately 300,000 households.



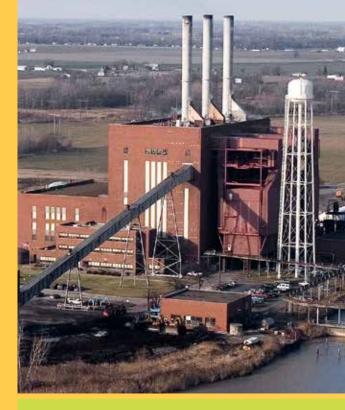
Located on an 875-acre site along two miles of Lake Erie shoreline in the city of Luna Pier, Whiting was the oldest and one of the smallest coal-fired plants in Consumers Energy's fleet. Yet, it contributed mightily to the homes and businesses it served.

In its 52<sup>nd</sup> year of operation, Whiting set a record, producing more

than 2.4 million megawatt-hours of electricity. From 1960 through 2011, Whiting's Unit 2 held the company record for a coal-fired unit operating continuously.

The crew that cared for Whiting was proud of the aging plant's triumphant spirit to the finish line in April 2016. Whiting's Units 1, 2 and 3 boast several company records including the longest run of continuous operation.

For employees, operational excellence and safety went hand-in-hand. From 2012 on, they worked more than 1,200 hours without a recordable or lost-time injury — the longest sustained safety performance in the site's history.



Below, Site Maintenance Manager Colin Dunham stood near Whiting's Unit 3, which produced the longest run in company history, cranking out power for 679 consecutive days.





#### Safety First

#### WHITING'S HARD-WORKING

employees embraced the company's relentless focus on building a positive safety culture, earning them a National Safety Council Award. They watched out for potential dangers and for each other as they worked to generate power for their families, friends and neighbors.

Employees' top priority was making sure everyone went home safely at the end of their shifts. They worked hard to identify and remove hazards and achieve zero lost-time injuries. In each of the past five consecutive years, they reduced the number of injuries.

## Powerful Performance

WHITING'S UNIT 3 set a record when it completed the longest continuous run in company history, cranking out electricity for 679 consecutive days from Dec. 4, 2013, to Oct. 14, 2015.

Unit 2 also set a record by operating 375 consecutive days before going offline on July 3, 2013, and as of Feb. 23, 2016, Unit 1 had purred along for 483 days.

Whiting's Unit 1 also was the first Consumers Energy coal-fired unit to install reverse osmosis equipment to provide the site with boiler feed water. The technology served as a best practice model for future installations at company coal-fired units.



## Environmental Excellence

WHITING EMPLOYEES continually monitored and analyzed the air and water to ensure the Whiting Plant complied with — and even exceeded — state and federal requirements.

For decades, Whiting employees worked to:

- · Clean the Lake Erie shoreline
- Protect nesting sites for waterfowl, shorebirds and threatened plant species on Whiting property
- Maintain a wildflower meadow and a pond filled with the American lotus, Michigan's official symbol of clean water

 Provide waterfowl and peregrine falcon nesting sites to increase endangered species populations

The plant's walls were adorned with environmental awards honoring employees who worked with their neighbors to protect the environment and local wildlife. Environmental allies included:

- The Lotus Garden Club of Monroe
- Ann Arbor Public Schools (Green Adventures Summer Camp)
- Bedford High School S.P.E.E.D. Robotics Team
- Bedford High School National Honor Society
- · Boy Scouts of America
- · Girl Scouts of America
- · National Audubon Society
- Erie Shores Birding Association
- Detroit River International Wildlife Refuge
- Wildlife Habitat Council

## Caring for Community

#### FROM THE PLANT MANAGER

to the newest employee, Whiting employees touched countless lives by giving generously to United Way and other nonprofit organizations. Beyond work, they immersed themselves in civic, church, community, school and service club activities.

They brought their award-winning safety knowledge into numerous





volunteer activities in the communities where they lived and worked by volunteering as firefighters, paramedics, auxiliary police, educators, Red Cross helpers, coaches and scouting leaders.

Over the years, thousands of dollars were awarded to nonprofit groups by the Consumers Energy Foundation on behalf of Whiting employees and retirees who volunteered to improve the quality of life in their communities.

Whiting employees also contributed significantly to the local economy each year by shopping in neighboring communities. Property taxes paid to the city of Luna Pier and Erie Township helped pay for roads, schools and services that made a positive impact for all residents.



# By the Numbers

**300,000** Approximate number of households served

875 Acres of land

328 Megawatts generated

**1.4** Million tons of coal burned each year (delivered by rail)

**312.5** Million gallons of water passed through each day

300 Height in feet above ground of each of three stacks

1952 Units 1 and 2 began operating

1953 Unit 3 began operating

**\$723,260** Property taxes paid in 2014

**\$80 million** Cost to build Whiting in the 1950s



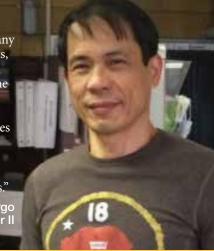
Main building, 1951



Mill foundations, 1951

"I was privileged to work at the J.R. Whiting Generating Plant, a wonderful place which I called home for the past 12 years. The company and plant management recognized our efforts, for which we all are very grateful. We always reminded ourselves of our purpose here at the plant — safe and excellent operations. We always strived to give our best. I extend my deep gratitude to all my friends and colleagues at J.R. Whiting for their selfless dedication, cooperation and support, which are the qualities of a good working environment. I wish them success in their future endeavors."

Jonas Panergo Senior Engineer II





Stephanie Watkins, Lead Chemistry Technician, helped keep the right chemical balance in the water-steam cycle that helped power the plant.





"The International Wildlife Refuge Alliance, a 'friends' organization for the Detroit River International Wildlife Refuge, was fortunate to have people from Consumers Energy serving on our board of directors since 2008. Their efforts combined with those of countless others at the J.R. Whiting Plant have made it possible for the Alliance to grow in stature and prominence as a volunteer organization."

Richard Micka Chairman International Wildlife Refuge Alliance







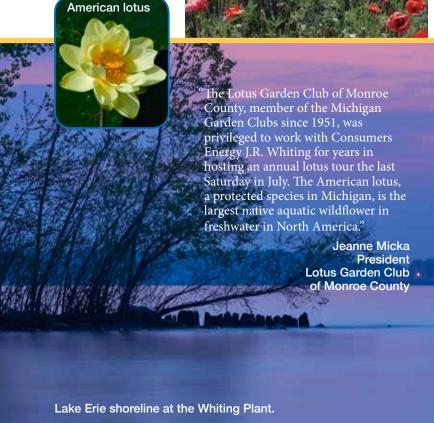


Turbine 3, 1953

"For me, it always comes back to my fellow J.R. Whiting employees who made working here more than just a job. I will always remember the caring attitude, the camaraderie, the 'I got your back' attitude of the people I have had the pleasure of spending my time with here. Thank you to all."

Tom St. Bernard Senior Technical Analyst II





#### **AWARDS**

**1991–2014:** The Whiting site was certified each of these years by the Wildlife Habitat Council for environmental stewardship.

**1993:** Whiting employees received a National Safety Council Award for working more than 2.4 million hours without a lost-time injury.

**1997–2015:** Whiting was recognized by the Michigan Department of Environmental Quality (MDEQ) each of these years with membership in the Michigan Business Pollution Prevention Partnership and was the first power plant to join.

**1998–2009:** Whiting received the Clean Corporate Citizen (C3) designation each of these years from the MDEQ. In 2005, Whiting became the first power plant to receive the C3 Longevity Award for maintaining the designation for five years or longer.

**2001:** Whiting employees received a National Safety Council Award for working more than 1.6 million hours without a lost-time injury.

**2004–2014:** Whiting received the Neighborhood Environmental Partners (NEP) Award every year it was offered by the MDEQ and was the first power plant to be awarded the NEP Gold and Longevity awards for maintaining the NEP designation for five and 10 consecutive years respectively.

**2015:** Consumers Energy received the John D. Dingell Friend of the Refuge Award from the Detroit River International Wildlife Refuge and the International Wildlife Refuge Alliance for stewardship of wildlife habitat along Lake Erie and the Detroit River.

#### **ACHIEVEMENTS**

**1960–2011:** Whiting Unit 2 held the company record for a coal-fired unit operating continuously.

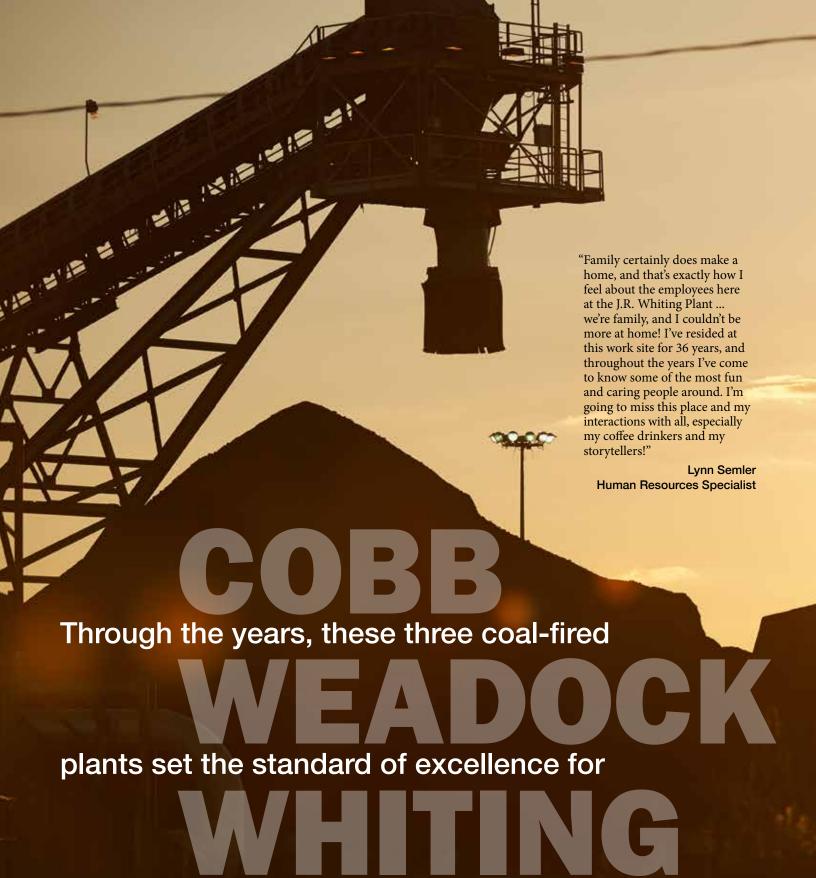
**2004:** Whiting produced more than 2.4 million megawatt-hours of electricity to set a record in its 52<sup>nd</sup> year of operation.

**2012-2016:** As of Feb. 23, 2016, Whiting employees worked 1,230 days without a recordable or lost-time injury, the longest sustained safety performance in site history.

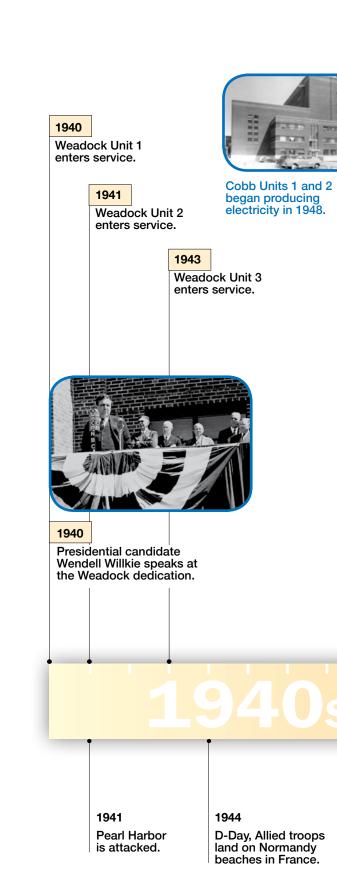
**2015:** Whiting's Unit 2 set a unit record by operating continuously for 375 days from June 24, 2014, to July 3, 2015; Unit 3 set a company record by operating continuously for 679 consecutive days from Dec. 4, 2013, to Oct. 14, 2015 — also the sixth longest run in U.S. fossil generation history.

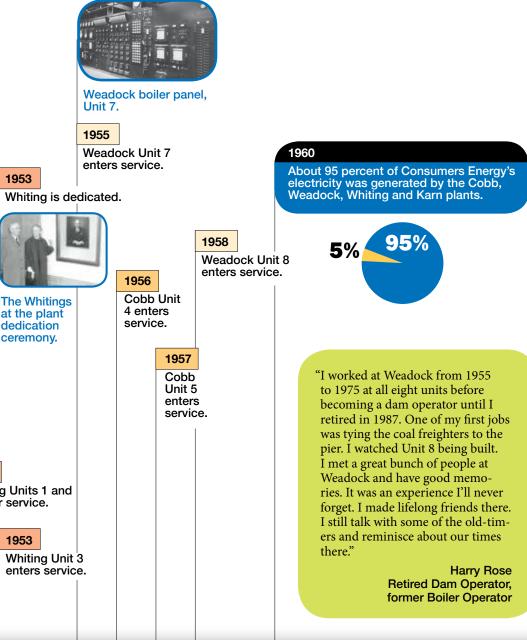
**2015:** Whiting's Units 2 and 3 electrostatic precipitators were declared "optimized" — the only such declarations in the company's generating portfolio.

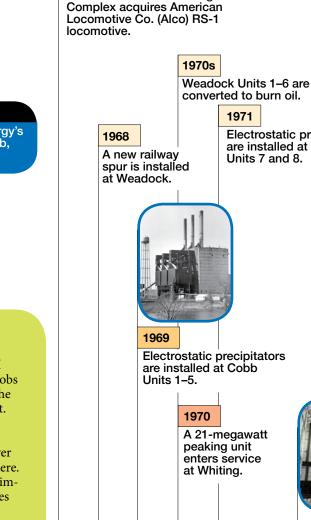
**2016:** As of Feb. 23, 2016, Whiting Unit 1 operated continuously for 483 days.



our company, state and industry.



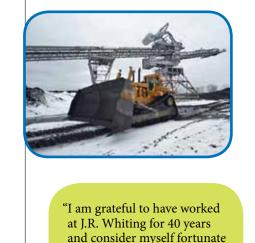




1967

Karn/Weadock Generating





to have worked alongside

many knowledgeable and

skilled employees. I am proud

to have worked for a company

Dan Ternes

**Qualified Welder** 

that set its safety standards

high and achieved record

Cobb Units 1, 2 and 3 are

mothballed for future use.

Cobb completes conversion

projects to burn Western coal.

1990-2002



2000

Whiting Units 1 and

2 are upgraded to

102 megawatts

124 megawatts.

and Unit 3 to

2003

Weadock Unit 7

runs continuously

for 305 consecutive

enclosed and capped at Cobb. Department beginning January 2010.

2007

A 60-acre ash

disposal field is



Consumers Energy

announces closure

of the Classic Seven

generating units at

Whiting.

Cobb, Weadock and

Operations employees at the Weadock Plant worked more than 2,000 days

Seawall and freighter dock

replacement is completed for

the Karn/Weadock Complex.

without a recordable injury, Whiting's ash ponds 3, 4 and 5 are closed.

2015

Seven units a

Cobb, Weadoc

and Whiting are

Weadock receives

Whiting receives last

coal delivery.

last coal delivery.

permanently

retired.

Whiting's 21-megawatt peaking unit is retired.

2010s

Weadock Unit 4

enters service.

Weadock Units 5

The Cobb Plant's first fuel

Cobb is dedicated.

Cobb (left) at

1950

enters

Cobb Unit 3

dedication.

at the plant

dedication

ceremony.

Whiting Units 1 and

2 enter service.

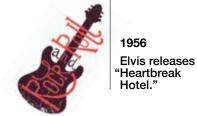
handling crew.

Cobb Units 1 and 2

enter service.

and 6 enter service.







Units 1 and 2.

Electrostatic precipitators

are installed at Whiting

1979

1979

Weadock completes

flue gas conditioning

project to efficiently

A radial coal stacker

that blends Eastern

and Western coal is

1980

installed at Weadock

are retired.

Weadock Units 1-6

New bunker chutes are

safety and reliability.

installed on Whiting Units 1, 2

and 3 to improve equipment

burn Western coal.

1980s

1996

Low-NOx burners

boilers at Whiting

Low-NOx burners

are installed on

boiler at Whiting

are installed on

Units 1 and 3.

to Consumers Energy.

Stadium.

"I'll miss working shoulder-to-shoulder with employees at Cobb. We laughed and had some good times. If we wrote everything down, we'd have a huge book. It's been enjoyable."

2000s

2012







Astronaut Neil Armstrong walks on the moon.

The Woodstock

music festival is

held in New York.

television show MASH premiers.

1972

Electrostatic precipitators

1974

Unit 3.

The 650-foot stack for Cobb

Units 1–5 is completed.

Electrostatic precipitators

are installed at Whiting

are installed at Weadock

Units 7 and 8.

President Gerald Ford of Grand Rapids takes office.

Popular

The Detroit Tigers win the World Series.

1985

Nintendo game system Count on Us®

**Consumers Power** changes its name

Comerica Park replaces Tiger

> John (Sam) Wheeler Coal Supply Handler

125th anniversary.

2015 Consumers Energy celebrates its Employees achieve the safest year in company history.





"The people and the life stories we shared are what I will remember the most from my 25-plus years working at the Cobb Plant. Over the years, we built a foundation based on friendship. We got to know each other's families and attended one another's personal life events, including weddings, birthday parties, retirement celebrations and even funerals. Cobb was a collection of intelligent people who took pride in their jobs and kept it real. Within the company, Cobb always had a reputation of being one of the friendliest places to visit. I will truly miss the people and the memories we shared."

Terrie Kinsey Document Control Campbell Unit 3

"The J.C. Weadock operations, maintenance and construction workforce, members of Utility Workers Union of America (UWUA) Local 144, have taken great pride and ownership in providing safe and reliable electricity to Consumers Energy customers in our community for the past 76 years. I am proud to say I started my career at the J.C. Weadock Plant in 1980 and it has been a pleasure to work with my executive board and the Michigan State Utility Workers Council to negotiate an agreement to keep jobs for our members from the Weadock Plant on the Karn/Weadock Complex at the Karn 1–4 plants."

Julian Zielinski, Jr.
Utility Workers Union of America Local 144 President

"It was a privilege to be part of the B.C. Cobb Plant's history and work with the people who made the plant so special. Thank you to all of the current and former employees who worked hard every day to provide safe, reliable and environmentally responsible power to Michigan communities. Job well done!"

> Norm Kapala Cobb Site Business Manager

"It has been a pleasure leading this team of professionals on a path toward retirement of a site with such a rich history. Achievements in safety performance and operational excellence have been the greatest experiences one could ever have asked for. Whiting is special to me personally as my father started his career here in its first few years of operation and I have the honor to say farewell to this legacy. The people here have made J.R. Whiting a great place to come to each and every day. I will miss the people of this great organization. Their support and never-ending desire to make the site successful has made all the difference."

Neil Dziedzic Whiting Site Manager "I grew up in Essexville, about three miles from the Weadock Plant. As a teenager, I remember hearing the units start up on hot summer days when my upstairs bedroom window was open. After college, I got a call for a job interview. That was 38 years ago. I enjoyed the freedom and flexibility of my job in the lab at Weadock. It kept me interested all these years. When Weadock closes, it will be strange and quiet."

Craig Carson Senior Laboratory Technician Weadock Units 7 and 8

"Thank you, Consumers Energy employees, for your support of Mission for Area People. You volunteer your time and give from your heart to help make your community a better place. Blessings to each and every one of you."

Diana Wright-Stubbs Mission for Area People Director Muskegon "What I remember about the Cobb Plant is the warm and friendly people who worked there. The employee relations climate was kind of a throwback to earlier days in the company's history when employees worked and played together without regard to their position within the company. All the employees knew each other and genuinely cared about each other with very few exceptions."

William Eckert Retired Senior Human Resources Consultant III

"I've been fortunate to have a good-paying union job, steady employment at a job I enjoy and love to do, and work close to home. But, by far, the people I work with are who I will miss the most."

Patti Thompson Utility Workers Union of America Local 258 President "J.R. Whiting is not just a power plant. J.R. Whiting's greatest assets are the people who dedicated their working lives to make it a success. The site may no longer be producing electricity, however, the plant will live on in the memories, the friendships and the bonds that were created and will continue to be carried with pride by each of us."

Colin Dunham Whiting Site Maintenance Manager

# WE ARE

"Consumers Energy and its J.R. Whiting facility were an important and vital partner in helping to foster economic development in Monroe County. The various plant managers helped our organization understand the important role that power generation plays in the growth of existing manufacturing facilities and the location of new ones. The three stacks at the Whiting Plant, when viewed at night with the lights shining on them, were a beautiful site. When traveling back into Michigan from out of state, I looked for the stacks as a beacon that let me know I was back home."

Tim Lake
President and CEO
Monroe County Business Development Corporation





"To me, Cobb was symbolized by its stack. No matter where you were in Muskegon, you could see it. I called it the 'North Star' of Muskegon Lake. As the public works director for the city of Muskegon, we worked with Consumers Energy on streetlights and substations for power to our water plant. With Consumers Energy, we often took advantage of techniques to reduce our peak-time usage in order to reduce our operating costs. Consumers Energy was the largest taxpayer in Muskegon County."

Bob Kuhn Retired Director Muskegon Department of Public Works "I consider myself to be lucky to have been part of a Whiting team that accomplished so much. We had the best workforce in the company. They knew the plant was closing but focused on working safe and keeping our units running to the end."

John Buck Whiting Production Supervisor

"United Way of Bay County is extremely proud to call Consumers Energy's J.C. Weadock a partner in investing in the future of Bay County. Consumers Energy's J.C. Weadock Plant has been a strong and powerful supporter of the United Way of Bay County for many decades. Employees have contributed not only in monetary means, but also by giving their time and talent as board and committee members in furthering the United Way cause to LIVE UNITED. The community is a better place because of all that J.C. Weadock employees have done, and their legacy will live on."

Marybeth Laisure Executive Director/CEO United Way of Bay County

"The people at Whiting are family. We don't always agree with one another but we do genuinely care about everyone. We've been together in the good times and the not-so-good times, laughed together and supported each other. These people welcomed me in over 16 years ago and I will miss working and interacting with them all. One thing is for certain, I won't ever forget the people who make up this family."

Gerald F. Rand, Jr. Environmental/Chemistry Lead

"I had the privilege of being the Cobb Plant's human resources director in the early- to mid-2000s. Having worked at many other plants in our system, I was initially struck by the warm welcome I received from all work groups. The relationships were very solid and it was clear to me the employees knew what was important. The focus on plant performance was always a priority, and employees worked together to make it happen!"

Steve Ellis Retired Human Resources Director





