



INSIDE SPORTS

Eagles sweep Indians from baseball playoffs Page 1B Coupons & savings of \$45

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Denton, Texas

Two dollars

PRICE OF POWER



Amelia Jaycen/For the DRC

A view from the 17th story of the Gibbons Creek Steam Electric Station shows the accordion-like limestone scrubbers connected to the smokestack, the coal pile in the distant yard and fly ash storage ponds to the left. The Texas Municipal Power Agency's plant is 20 miles east of College Station.

Denton faces choices on energy sources as coal plant deal ends in 2018

By Amelia Jaycen

For the Denton Record-Chronicle

NDERSON — Strad-

dling a dammed-up creek 20 miles east of College Station squats the Gibbons Creek Steam Electric Station, a massive coalfired power plant supplying the city-owned utilities of Denton, Bryan, Garland and Greenville.

In the plant, a boiler is suspended from a steel beam like a glowing bee's nest hanging from a giant tree limb. A conveyor feeds the boiler finely ground coal, fueling a fireball hotter than flowing lava. The fireball heats a 21-story-high maze of interconnecting pipes filled with water used to make steam. Other pipes inject air into the fireball to dampen it down, oxidize mercury and reduce the amount of nitrous oxide the combustion produces

The control room on top of the plant is aglow with computer screens where workers in overalls press buttons to control feeders, fans and flow rates, and monitor the behavior of the fireball inside the boiler. Good behavior is determined by how much and what form of sulfur, carbon, mercury, nitrogen, particulates and other contaminates the burning coal produces.

EDITOR'S NOTE: This is part of a continuing series of stories on North Texas infrastructure in the 21st century. The series was produced by the *Denton Record-Chronicle* and the Mayborn Graduate Institute of Journalism at the University of North Texas. Amelia Jaycen is a graduate student. The story was edited by professor George Getschow.

"All this is just a giant chemistry experiment," said Jan Horbaczewski, the plant's regulatory compliance officer, noting "it's not always easy" to comply with increasingly stringent federal emission regulations.

Today, the Gibbons Creek plant accounts for 44

See ELECTRIC on 1A



AP file photo

Mosquitoes are sorted at the Dallas County mosquito lab in 2012. This year's first human case of West Nile virus in Texas was confirmed last week in Harris County.

County waits for West Nile to emerge

By Bj Lewis Staff Writer

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Mosquitoes carrying West Nile virus have made their appearance in Texas.

As Dallas County begins spraying in response to mosquito traps testing positive for the virus and as Harris County sees the state's first human case this year, Denton County health officials continue to wait to see what happens here.

"Mosquitoes love water, and this year we have an abundance of it," said Leslie Freeman, environmental coordinator with the Denton County Health Department. "Anyone can deduce the potential is here for more mosquitoes, but that is yet to be seen."

Freeman said he expects the mosquito season, which usually runs from April to October, to be fairly active.

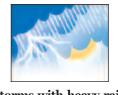
Talks about impending mosquito threats have not occurred any more than last year, Freeman said.

"I think we always prepare for the worst and hope for the best — that's what we usually try to do," he said.

County officials began setting out traps the first of May, as soon as state health labs in Austin opened to receive samples. No positive samples have been

See MOSQUITOES on 23A

TODAY IN DENTON



Storms with heavy rain likely High: 77 Low: 67 Three-day forecast, 2A

FIND IT INSIDE	
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DEAR ABBY	8C
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STATE

A budget deal between the House and Senate would deliver lower taxes, but for many homeowners the windfall will be fleeting. Page 3A

NATIONAL

A Cleveland patrolman was acquitted Saturday in the deaths of two unarmed black suspects after a high-speed chase.

Page 5A

Ireland's citizens have voted in a landslide to legalize gay marriage. Page 14A

Police designate safer space for trades

Departments offer up stations for online buyers, sellers to meet

By Adam Schrader Staff Writer

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The Flower Mound Police

The Flower Mound Police Department recently put up two signs marking two adjacent spaces in its parking lot. Police hope the signs, which read "online exchange zone," will encourage smarter shopping with online classified sites such as Craigslist.

Wess Griffin, a Flower Mound police spokesman, said the signs are precautionary measures. So far, the town has been fortunate to avoid incidents in which an unwary buyer or seller gets ambushed when meeting someone

See TRADE on 17A

Soggy lot



Kristen Watson/DRC

A boy walks through a flooded parking lot Saturday near the edge of Lewisville Lake at Cottonwood Creek Marina in Little Elm. With saturated soils and heavy rainfall predicted, a flash flood watch is in effect for the area through at least this evening.



Photos by Amelia Jaycen/For the DRC

The coal-fired power plant at Gibbons Creek Steam Electric Station is owned by the Texas Municipal Power Agency, created by the cities of Denton, Garland, Bryan and Greenville to produce electricity. The plant, 20 miles east of College Station, is viewed here at a distance from the lignite mine property next door, which was closed in 1995.

From Page 1A

Electric

percent of Denton Municipal Electric's power generation. Another 40 percent of Denton's electricity comes from a wind farm in Muenster, and 15 percent comes from natural gas. Denton also generates a tiny fraction of its power, about 1 percent, from a methane collection system at the city's landfill.

One foot stuck in the past

Denton Municipal Electric officials say that though the utility wants to wean itself off fossil fuels and harness more renewable energy supplies for future power generation, at the moment it finds itself with one foot stuck in the past — specifically, the 32-year-old coal-fired power plant.

"If we decided tomorrow we wanted to go 100 percent renewable, we could do that," says DME spokesman Brian Daskam. "But we'd still be paying for this power that we're not taking from the coal plant."

In 2018, a long-standing power sales agreement ends between Denton, Bryan, Garland and Greenville and the agency created to run the plant, the Texas Municipal Power Agency. Denton's energy planners said they will have more flexibility in choosing the city's energy portfolio in the future when the agreement expires.

"We call it a 2018-and-beyond plan," says Craig York, the director of the Gibbons Creek plant.

In the next three years, Denton's energy planners will have to make critical decisions to ensure the utility can meet the city's growing power needs. The growing population has spurred an estimated 21.8 percent rise in energy demand and strained the city's transmission infrastructure.

Meanwhile, recent abundant supplies of relatively inexpensive natural gas have made gas-powered generation sometimes cheaper than coal. In 2012, for example, the Texas Municipal Power Agency shut down the coal plant for 120 days because of cheap and abundant gas supplies.

"I don't like it when I come to work and it's quiet," says York, the plant manager. "I like to hear the noise."

Oil embargo revved up Gibbons Creek

After the oil embargo by the Organization of Petroleum Exporting Countries in 1973, coal became the fuel of choice for American power plants. As oil and gas imports shrank, federal energy regulators mandated no new gas-fired power plants could be built in the United

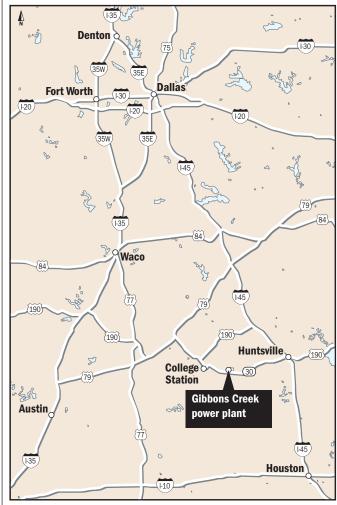
Gibbons Creek Steam Electric Station director Craig York, on the 17th story of the power plant, opens a door to show the glowing, 2,000-degree fireball inside the coal-fired boiler. The fireball is controlled by adjusting air-tofuel mixtures, chemical conditions, oxidation of mercury and formation of carbon



ON THE MAP

monoxide.

The Gibbons Creek Steam Electric Station is located east of College Station and north of Anderson. The plant supplies electrical power to several cities in Texas, including Denton.



Jason Lee/DRO

States

States.

In 1975, Denton, Garland, Greenville and Bryan banded together to create the Texas Municipal Power Agency, investing billions of dollars to mine and produce local supplies of lignite to burn in the plant. The agency also purchased a small share of the Comanche Peak nuclear power plant in Glen Rose but later withdrew from the project after it fell behind schedule and went

over budget.

By the time the coal-fired plant began producing electricity in 1983, Denton and the three other cities faced skyrocketing interest rates on the millions borrowed to buy the land, open the mine and construct the power plant.

The agency "made bad choices concerning lignite coal," says Mike Cochran, a former Denton City Council member. "They made bad choices getting

"If we decided tomorrow we wanted to go 100 percent renewable, we could do that. But we'd still be paying for this power that we're not taking from the coal plant."

— Brian Daskam, Denton Municipal Electric spokesman

"[The only option is] to improve efficiency, to squeeze more juice out of the plant, and we've pretty well done that."

— Jan Horbaczewski, regulatory compliance officer at Gibbons Creek Steam Electric Station

involved in nuclear power. And they made bad choices with not reducing their debt properly in

a business-like manner."

Before the plant even opened, a group of Denton residents, chafing over their rising electric bills, the growing debt and the threat of dangerous emissions from burning lowgrade, high-sulfur lignite for electricity, went on the warpath. They filed a recall petition against three members of the City Council.

City Council.

Bill Trantham, a Denton attorney who represented the citizens in their lawsuit, claims the TMPA partnership was "a fiasco from start to finish." The deal, he said, put Denton residents and municipal utility customers in a bind long before the first megawatt of electricity was produced.

"I got hold of their financial statement, and we owed \$1.77 billion on it and the plant hadn't even started," Trantham says.

The lawsuit didn't stop Denton and its partners from building the plant or mining and burning lignite. Between 1983 and 1995, the plant burned the local fuel, filling the air with high-sulfur soot and heavy metals. But in 1995, the plant un-

derwent its first major environmental upgrade. Gibbons Creek Steam Electric Station would burn low-sulfur coal instead, shipped from Wyoming's Powder River Basin 1,400 miles away. The lignite mine was shut down within a year. During the past two decades, the 8,825 acres of prairie stripped to extract the lignite has been the object of reclamation efforts.

Denton Municipal Electric won't say for sure whether it is going to leave the Texas Municipal Power Agency in 2018 and rid itself of its dependence on coal for electricity. For now, DME is obligated under "take or pay" agreements with the agency to take 21.3 percent of the electricity produced by the plant and repay the debt regardless of whether it buys the plant's power.

The question the utility faces is, "How clean do we want our power to be, and how much are we willing to pay for that?" Daskam says.

On the other hand, the city of Bryan plans to rely on coalfired generation from Gibbons Creek into the foreseeable fu-

Once Bryan's debt is paid off in 2018, "as long as that plant is

in good shape ... we will want to continue to run it because it will be significantly less expensive than it is today because of the debt," said Gary Miller, director of Bryan Texas Utilities. "Bryan's plan is to utilize that plant for well into the future."

Cheap power ... for now

DME customers are paying on average a few cents less per kilowatt hour for electricity than their neighbors in other markets. In Lewisville, McKinney and Argyle, electricity costs range from 5 cents to 13 cents per kilowatt hour, compared to between 3.9 cents to 5.86 cents per kilowatt hour in Denton. Unlike consumers in Dallas, Houston and other major cities, Denton utility customers cannot choose from dozens of deregulated electricity providers in Texas that offer different pricing schemes to customers.

DME said for now, its customers enjoy lower rates primarily because the coal-fired plant supplies lower-cost electricity to Denton than its neighbors obtain from their suppliers. But that price advantage could shrivel with costly federal environmental regulations that have been proposed for coal-fired plants.

The proposed regulations "are of great concern to me," says Horbaczewski, the plant's compliance officer, noting the Gibbons Creek plant uses best available control technology for carbon dioxide and other pollutants.

That means the plant's only option is "to improve efficiency, to squeeze more juice out of the plant, and we've pretty well done that," he says.

The agency spent \$12 million to reduce the plant's nitrous oxide emissions more than a decade ago by fine-tuning fuel and air-supply systems. In 2011, another \$98.5 million was spent to refurbish the scrubber, which uses limestone to filter particulates out of the flue gas, to meet new federal standards limiting emissions of sulfur dioxide.

This year, the plant installed a \$1 million system to measure mercury emissions in parts per trillion.

Ultimately, the cost of each environmental upgrade is paid for by higher electric rates.

"You'll see it on your electric bill," said York, the plant director.

Once the debt obligations to bond holders are paid off in 2018, Denton and the other cities in the Texas Municipal Power Agency will decide whether to pass the savings to customers or to keep some in the company kitty to cover the cost of tougher emission standards. Mayor Chris Watts said whether the savings trickle down to customers or are reinvested is yet to be determined.