

Life ON THE Lakes

INFORMATION ABOUT LAKES HAMILTON AND CATHERINE



Entergy®

Entergy Continues Long Tradition of Using Efficient, Environmentally Friendly Generation



Entergy is a leader in clean power generation, starting when Rempel and Carpenter dams were built in the 1920s. In 2019, Entergy's carbon emissions rate was much lower than the national average per megawatt-hour.

In addition, nuclear generation remains a key component of our clean generation portfolio. Our nuclear assets provide significant benefits to our stakeholders through low-cost, reliable, and diversity; reduced fuel price volatility; and positive economic impact on local communities.

In our power generation fleet, we established our portfolio transformation strategy to better meet customers' needs by replacing older, less efficient generation with cleaner, more efficient resources.

Solar

We continue adding solar power generation to our portfolio:

- We have installed or are targeting into 2023 more than 1,000 megawatts of solar projects in the four states of our service territory.
- In New Orleans, in addition to our 2016 New Orleans Solar Power Plant, we have added a rooftop solar program and are working to complete the New Orleans Solar Station, St. James Solar and Iris Solar by the end of 2021.
- In Arkansas, in addition to power purchased from Stuttgart Solar, construction continued on Chicot, Searcy and Walnut Ridge solar projects, each rated at 100 megawatts.
- In Louisiana, we are adding Capital Region Solar and South Alexander Solar and are targeting an additional 300 megawatts of solar by 2023.
- For Mississippi, in addition to Brookhaven Solar in 2016, we are expecting to add the 100-MW Sunflower County Solar Plant in 2021.

Natural Gas

Another portion of our portfolio transformation strategy relies on efficient natural gas. These new units generally have much lower emissions than those they are replacing.

- In May 2019, Entergy Louisiana completed construction of J. Wayne Leonard Power Station, a 943-MW combined-cycle gas turbine facility, in Montz, Louisiana.
- In October 2019, Entergy Mississippi acquired Choctaw County Generating Station, a 2003 810-MW CCGT unit, in French Camp, Mississippi.
- In March 2020, Entergy Louisiana's Lake Charles Power Station, a 994-MW CCGT unit, began commercial operation.
- This year, the Entergy New Orleans Power Station, a 128-MW unit composed of natural gas-powered reciprocating internal combustion engines, achieved commercial operation.
- The Washington Parish Energy Center, a 361-MW simple-cycle combustion turbine unit, in Bogalusa, Louisiana, is expected to reach commercial operation in early 2021.
- Entergy Texas began construction of Montgomery County Power Station, a 993-MW CCGT unit, located next to the company's existing Lewis Creek power units. The facility has an estimated in-service date of 2021.

We continually analyze power generation needs within our generating capability. As they are needed, investments in generation help Entergy modernize infrastructure, serve load growth and maintain our environmental focus.

Electrical Component Requirements Over Water

There has been some confusion on the requirements for electricity on docks and other facilities over water. Owners of all facilities on lakes Hamilton and Catherine are responsible for ensuring that all electrical components on their facilities comply with current guidelines and standards. Entergy Arkansas requires that all docks that change ownership (which requires a permit transfer), be brought into compliance with all applicable federal, state and local codes before they can transfer to the new owner.

Arkansas law requires facilities over water to conform to the latest National Electric Code adopted, which is NEC 2017. A provision of the code deals with ground fault circuit interrupters which has led to some concern. So, we reached out to the state electrical inspector, as well as the chief state electrical inspector, for guidance and clarification.

Here's what they say: Similar to how GFCI breakers and outlets offer protection in the wet areas of your home (kitchen, bathroom, laundry, etc.) a GFCI breaker, or an in-line GFCI outlet providing the service to the facility, must be installed at a point on the system before it leaves the mainland and transitions to the dock. The maximum this GFCI protection can be is 30mA, which is considered adequate protection for equipment, but not people. What's considered safe for people is a breaker that will trip at 4-7mA. If a GFCI breaker of greater than that is installed at the breaker box, to achieve personal protection you will also need to install covered 4-7mA GFCI outlets on the dock. If a 4-7mA breaker, or in-line outlet, is installed on the mainland feed, no further GFCI will be required over the water. But, all outlets and switches installed over the water are still required to be outdoor rated and enclosed in covered boxes.

If you have any questions Entergy recommends that you contact a licensed electrician and/or the State Electrical Inspector's office at 501-682-4548.

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2020



Floods



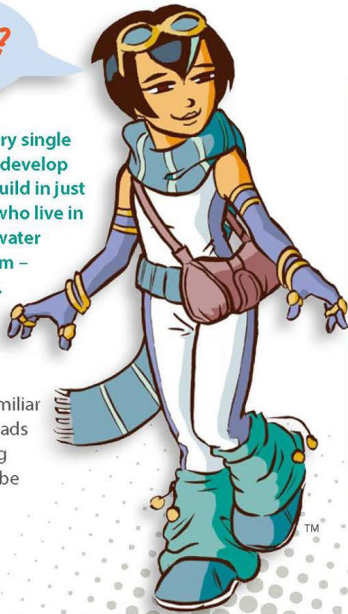
Flooding happens during heavy rains, when rivers overflow, when ocean waves come onshore, when snow melts too fast, or when dams or levees break. This is the most common natural-weather event. Flooding may be only a few inches of water, or it may cover a house to the rooftop. Floods that happen very quickly are called flash floods.

Am I at risk?

Floods can occur in every single U.S. state. Some floods develop slowly, and some can build in just a few minutes. People who live in low-lying areas – near water or behind a levee or dam – are at even greater risk.

Did you know?

Flooding can change familiar places, like walkways, roads and fields. Avoid walking through water. It might be deeper than you think!



FACT CHECK

1. Which of the following does NOT cause a flood?
 - a. Tropical storms and hurricanes
 - b. Spring thaw and melting snow
 - c. New construction
 - d. None – they can all cause floods
2. True or False? 1 foot of water is enough to make most cars float.
3. True or False? 6 inches of moving water can sweep you off your feet.

ANSWERS (1) D, (2) True! (3) True. Stay away from moving water!



For more facts and info on floods visit
<http://www.ready.gov/kids/know-the-facts/floods>
<http://emergency.cdc.gov/disasters/floods/>

What to do...

If you notice a problem at a dam – call 911. Local authorities know who to contact when there are concerns with the local dams on the Ouachita River.

If you notice a river/lake is unexpectedly high and rising on a clear day – immediately head for higher ground and call 911 to report the situation.

If a road is covered with water – remember that floodwaters are deceptive. As the old saying goes, “Turn around, don’t drown.” Roadways can become compromised by floods and these weak spots are not always visible. Avoid flooded areas if you can.

If your car stalls in a flooded area – abandon it as soon as possible. Floodwaters can rise rapidly and sweep a car – and its occupants – away.

If a flood traps you in your house – move to the second floor and, if necessary, to the roof. Take warm clothing, a flashlight and portable radio with you. Then wait for help; don’t try to swim to safety. Rescue teams will be looking for you.

If you receive a reverse 911 call – first, take it seriously. Next, listen carefully and follow all of the instructions from the phone call. If it is to warn you of a flood, it may tell you to stay in your home or head to higher ground immediately. Do so as quickly as possible.

Entergy Arkansas, LLC monitors Carpenter and Rammel dams 24/7, but if you notice an unusual situation concerning the lake levels or the dams, call 911 to report it. Thanks to FEMA publication 593-237B (9/90) for information used in this article.

FLOODING? BE SAFE!

Turn Around Don't Drown



Illegal pump to blame for killing wildlife this summer on Lake Hamilton



*sample photo

Entergy Arkansas Lake Lighting Requirements

The article on the front cover of this newsletter, "Electrical Component Requirements Over Water," focuses on Arkansas state law. Property owners also must comply with Entergy Arkansas' additional lighting requirements.

Inspections reveal lighting installations at nearly every address on the lakes are out of compliance. This includes lighting along seawalls, boardwalks, dock facilities, etc.



Entergy Guidelines require:

1. All lighting to be low-watt yellow.
2. All fixtures are to be shielded, directing the light down to the walking surface and not out to the water.

Property owners seem to understand the low-watt yellow bulb requirement but become confused on light shielding. Shielding is like a metal lampshade that prevents the bulb from being seen from the side.

Several property owners use clear or frosted glass or plastic-enclosed bulbs. These do not adequately shield the light, as they do not recess the bulb into the shield to direct the light source down rather than out.

Open bulbs can easily be replaced with inherently shielded yellow flood lights found at local hardware stores. For those with formal fixtures, fluorescent options are available that are designed to allow the yellow bulbs to be recessed into the metal hood. Other options are available for fixtures mounted to the side of or top of posts.

An online search for "dark sky light fixtures" should return several qualified options for purchase. For more information, visit darksky.org, or send to shoreline@entergy.com. a photo example of the fixture you wish to install to have it verified before purchase and installation.

Dark-sky-friendly lighting is intended to minimize light pollution. Additionally, Entergy Arkansas' guidelines seek to minimize the impact of shoreline lighting on those navigating the waters at night.

Who to Call When...



Lights out on the bridge- This can be a navigation and safety concern. The Arkansas Department of Transportation, which maintains the lights, can be reached at 870-623-8312.

Reporting an accident- Two agencies handle boating regulation and enforcement: Arkansas Game and Fish Commission and Garland County Marine Patrol. If you have a boating accident, or see one, call AFGC at 501-525-0929 or the Garland County Sheriff Office at 501-622-3660.

Overflowing storm drains/storm water soil run-off- Inside the city limits call Hot Springs Storm Water Division at 501-321-6773. Outside the city limits call Garland County Inspections Department at 501-609-9067. You can also report it to the Arkansas Department of Environmental Quality at 501-682-0744.

Someone is burning or depositing yard waste in the lake bed- This is against Arkansas Law and you can report it to the Garland County Inspections Department at 501-609-9067.

Someone is digging, 4-wheeling, or using other equipment in the lake bed- This is damaging to the lake bed and can increase soil runoff please let us know at: shoreline@entergy.com.



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 Hydro Operations
 141 West County Line Road
 Malvern, Arkansas 72104

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What Requires a Permit?

All shoreline facilities, structures and ground-disturbing activities on Entergy Arkansas, LLC Project 271 lands, or water, require a permit from Entergy Arkansas prior to installation or activity. Some of the most common types of facilities, structures and activities that require a permit include:

- Boat docks
- Piers
- Landings
- PWC ramps/lifts
- Decks
- Walkways
- Boardwalks
- Bridges
- Boat Ramps
- Steps
- Seawalls
- Riprap
- Fill/dredge
- Excavation
- Roads
- Waterlines
- Buoys
- Utility facilities
- Water withdrawal
- Heat/Air exchange piping
- Inflatable platforms/trampolines
- Boat lifts (when outside the slip)



Any changes to the footprint, roof line, support structure or change in the size of an existing facility requires a new application/permit.

To learn more about Entergy Arkansas' shoreline facility permit program and the requirements and specifications for private facilities on Entergy Arkansas' property, visit our website at entergy.com/hydro or contact us at shoreline@entergy.com.

Do you know of lakefront property owners who are not receiving this publication?

Send their names, addresses & emails to:
shoreline@entergy.com.

For General Permitting Information:
 Visit entergy.com/permitinfo

For Shoreline Facility/Activity Booklet:
 Visit entergy.com/shorelineapplication

For Flow Release Information:
 Visit entergy.com/hydro
 or call (501) 844-2125

2021 Spring/Summer Issue will focus on vegetation control