

# Minor earthquake recorded at Jocassee

THE JOURNAL STAFF

**SUNSET** — An earthquake shook northern Pickens County on Monday evening, but it was likely not felt by many people, according to the U.S. Geological Survey.

The magnitude 2.2 quake was epicentered near the eastern shore of Lake Jocassee at 5:59 p.m., according to the USGS.

Officials said very few people feel earthquakes with a magnitude lower than 3.0. The remote location of Monday's quake, near Horse Pasture Road in Sunset, dropped the

odds of people feeling its effects even more.

Duke Energy spokeswoman Mikayla Kreuzberger said the earthquake was not detected by any of the on-site monitoring equipment at Oconee Nuclear Station and did not affect the plant.

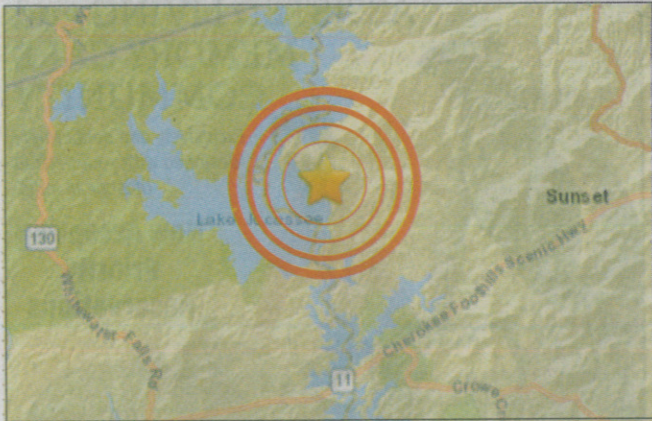
"The earthquake didn't meet the criteria for required inspection of our dams, but in an abundance of precaution, all of our dams were inspected and are safe," she said. "Duke Energy is committed to keeping



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**An earthquake Monday at Lake Jocassee in northern Pickens County was the strongest of several earthquakes that have been recorded around the area over the past year.**

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**Monday's earthquake was epicentered near the eastern shore of Lake Jocassee at 5:59 p.m.**

its neighbors safe — safety is our first priority."

Monday's quake was not the first around Jocassee and northern Keowee in the last year, according to the USGS. On Nov. 13, a 2.16 magnitude earthquake was recorded just across the North Carolina state line near Toxaway Falls. In addition, a magnitude 1.9 quake was recorded near Devils Fork State Park on Jocassee's western shore on Oct. 2, and a 1.66 magnitude quake was detected Aug. 8 in northern Pickens County.

Since at least 1776, people living inland in North and South Carolina, and

in adjacent parts of Georgia and Tennessee, have felt small earthquakes and suffered damage from infrequent larger ones, according to the USGS.

The largest earthquake in the area — with a magnitude of 5.1 — occurred in 1916.

Moderately damaging earthquakes strike the inland Carolinas every few decades, and smaller earthquakes are felt about once each year or two.

Earthquakes in the central and eastern U.S., although less frequent than in the western U.S., are typically felt over a much broader region. Earthquakes every-

where occur on faults within bedrock, usually miles deep. Most bedrock beneath the inland Carolinas was assembled as continents collided to form a supercontinent about 500-300 million years ago, raising the Appalachian Mountains. Most of the rest of the bedrock formed when the supercontinent rifted apart about 200 million years ago to form what are now the northeastern U.S., the Atlantic Ocean and Europe.

At well-studied plate boundaries like the San Andreas fault system in California, often scientists can determine the name of the specific fault that is responsible for an

earthquake. In contrast, east of the Rocky Mountains this is rarely the case.

The inland Carolinas region is far from the nearest plate boundaries, which are in the center of the Atlantic Ocean and in the Caribbean Sea. The region is laced with known faults, but numerous smaller or deeply buried faults remain undetected. Even the known faults are poorly located at earthquake depths.

Accordingly, few, if any, earthquakes in the inland Carolinas can be linked to named faults. It is difficult to determine if a known fault is still active and could slip and cause an earthquake.