

Excerpts from “A Timeline of the 2003 Blackout”
Aug 17 - Associated Press

- 2 p.m. FirstEnergy's Eastlake Unit 5, a 680-megawatt coal generation plant in Eastlake, Ohio, trips off. A giant puff of ash from the plant rains down on neighbors. On a hot summer afternoon, "that wasn't a unique event in and of itself," says Ralph DiNicola, spokesman for Akron, Ohio-based FirstEnergy. "We had some transmission lines out of service and the Eastlake system tripped out of service, but we didn't have any outages related to those events."
- 3:06 p.m. FirstEnergy's Chamberlin-Harding power transmission line, a 345-kilovolt power line in northeastern Ohio, trips. The company hasn't reported a cause, but the outage put extra strain on FirstEnergy's Hanna-Juniper line, the next to go dark.
- 3:32 p.m. Extra power coursing through FirstEnergy's Hanna-Juniper 345-kilovolt line heats the wires, causing them to sag into a tree and trip.
- 3:41 p.m. An overload on First Energy's Star-South Canton 345-kilovolt line trips a breaker at the Star switching station, where FirstEnergy's grid interconnects with a neighboring grid owned by the American Electric Power Co. AEP's Star station is also in northeastern Ohio.
- 3:46 p.m. AEP's 345-kilovolt Tidd-Canton Control transmission line also trips where it interconnects with FirstEnergy's grid, at AEP's connection station in Canton, Ohio.
- 4:06 p.m. FirstEnergy's Sammis-Star 345-kilovolt line, also in northeast Ohio, trips, then reconnects.
- 4:08 p.m. Utilities in Canada and the eastern United States see wild power swings. "It was a hopscotch event, not a big cascading domino effect," says Sean O'Leary, chief executive of Genscape, a company that monitors electric transmissions.
- 4:09 p.m. The already lowered voltage coursing to customers of Cleveland Public Power, inside the city of Cleveland, plummets to zero. "It was like taking a light switch and turning it off," says Jim Majer, commissioner of Cleveland Public Power. "It was like a heart attack. It went straight down from 300 megawatts to zero."
- 4:10 p.m. The Campbell No. 3 coal-fired power plant near Grand Haven, Mich., trips off.
- 4:10 p.m. A 345-kilovolt line known as Hampton-Thetford, in Michigan, trips.
- 4:10 p.m. A 345-kilovolt line known as Oneida-Majestic, also in Michigan, trips.
- 4:11 p.m. Orion Avon Lake Unit 9, a coal-fired power plant in Avon Lake, Ohio, trips.

- 4:11 p.m. A transmission line running along the Lake Erie shore to the Davis-Besse nuclear plant near Toledo, Ohio, trips.
- 4:11 p.m. A transmission line in northwest Ohio connecting Midway, Lemoyne and Foster substations trips.
- 4:11 p.m. The Perry Unit 1 nuclear reactor in Perry, Ohio, shuts down automatically after losing power.
- 4:11 p.m. The FitzPatrick nuclear reactor in Oswego, N.Y., shuts down automatically after losing power.
- 4:12 p.m. The Bruce Nuclear station in Ontario, Canada, shuts down automatically after losing power.
- 4:12 p.m. Rochester Gas & Electric's Ginna nuclear plant near Rochester, N.Y., shuts down automatically after losing power.
- 4:12 p.m. Nine Mile Point nuclear reactor near Oswego, N.Y., shuts down automatically after losing power.
- 4:15 p.m. FirstEnergy's Sammis-Star 345-kilovolt line, in northeast Ohio, trips and reconnects a second time.
- 4:16 p.m. Oyster Creek nuclear plant in Forked River, N.J., shuts down automatically because of power fluctuations on the grid.
- 4:17 p.m. The Enrico Fermi Nuclear plant near Detroit shuts down automatically after losing power.
- 4:17-4:21 p.m. Numerous power transmission lines in Michigan trip.
- 4:25 p.m. Indian Point nuclear power plants 2 and 3 in Buchanan, N.Y., shut down automatically after losing power.