

Stormy end on the way for heat wave that has blanketed country

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Relief is on the way from the brutal heat wave that has punished the Northeast and Midwest all week, but it'll come at a price — severe thunderstorms and perhaps tornadoes.

The Midwest will be first to get a break. A dip in the jet stream will clear the way for a cold front. But it will also provide the energy for severe storms, beginning Thursday night in Minnesota, Michigan and Wisconsin.

The same rough weather is possible Friday in Chicago, Detroit and maybe Cleveland and Indianapolis. Damaging wind, large hail and tornadoes are all possible, said Kevin Roth, lead meteorologist for The Weather Channel.

Most of the Northeast is out of luck until Saturday, though. New York was expected to hit 97 degrees on Thursday and 98 on Friday before daytime temperatures gradually drop over the weekend.

Full heat wave coverage from weather.com

In Plymouth, Mass., the relentless heat wave may even cause the Pilgrim Nuclear Power Station to shut down, the Cape Cod Times reported Thursday. This week's high temperatures caused the waters around the plant to spike to levels higher than the Nuclear Regulatory Commission deems safe cool key systems.

The water being drawn from the bay must not rise above 75 degrees, according to the NRC's guidelines, but it exceeded that for about 90 minutes on Tuesday, according to the paper.



Matt Rourke / AP Salesman Hyper Rosado cools off in between customers during the afternoon heat at Appliances R Us, on Thursday, in Philadelphia.

If the water temperatures do not come down, the plant has 24 hours to completely shut down. A spokesperson for the NRC told the Times that the situation is being closely monitored.

The plant provides power to about 680,000 homes and about 15 percent of the electricity used in Massachusetts, a spokesperson told the newspaper.

Last summer, The Millstone Unit 2 power plant in Connecticut was forced to shut down because of the same issue during a heat wave. Owners of that plant have since asked the government agency to

increase the water temperature limit to 80 degrees.

The NRC is currently reviewing the request.

Shutting down a power plant, even for a short period of time, can have a huge dollar impact as well, according to plant operators.

And the heat has been frying profits for some much smaller businesses, too. It's hot enough in New York that at least one sidewalk vendor had to turn off his grill and coffee machine.

"It was just too hot. I couldn't breathe," Ahmad Qayumi told The Associated Press as he turned away a customer who wanted a hamburger. "Just cold drinks."

New York's JFK Airport set a new marker for the hottest July 18 on record, hitting 100 degrees Thursday afternoon and shattering the previous record of 96 degrees set last year.

The heat wave, the longest and worst of the summer, has smothered most of the country. Forty-seven of the 50 states were expected to top 90 degrees on Thursday, forecasters said.

A dome of high pressure parked itself over the Ohio Valley and the Northeast earlier this week and hasn't let up. Cities in the northern half of the country have been warmer than spots in the Southwest.

Humidity has made it worse, pushing the heat index above 100 in many places.

It was hot enough that pavement buckled in some states, and 300 people in Indianapolis were evacuated from a living center for seniors after a power outage knocked out the air conditioning.

Amtrak said the heat wave was to blame for wire problems that disrupted service in the Northeast on Wednesday. Workers completed repairs Wednesday night.

Illinois opened cooling centers, and the Environmental Protection Agency said the heat was contributing to air pollution in New England.

There was good news in Prince George's County, Md., where 100,000 people were told that they might be without water through the weekend. Crews now expect to fix their repairs without turning off the tap.

Still, for most of the country, at least one more day of suffocating heat was on the way Thursday. At the World Trade Center construction site in New York, workers draped towels around their necks to catch the sweat.

"We're drinking a lot of water, down under by the tracks, in and out of the sun all day — very hot," Elizabeth Fontanez, a carpenter who was working 20 pounds of equipment strapped to her waist, told the AP.

The New Hampshire Fish and Game Department said on Thursday that a 30-year-old man who had lost consciousness a day earlier while hiking in the White Mountains had died. The department said the cause of death has not yet been determined, but cautioned hikers to stay well hydrated while outdoors.

And while brutal temperatures are not uncommon for this time of year, at least one aspect of the devastating heat wave is – it is moving backwards.

U.S. weather systems normally move west to east, but the western Atlantic high pressure system that is to blame for the warm temperatures moved in the opposite direction last week, Jon Gottschalck, the operations chief at the National Weather Service's prediction branch told the Associated Press.

Gottschalck said the unusual movement, which occurs less frequently than once each year, is likely the result of the natural chaos of the atmosphere.

"It's definitely unusual and going the wrong way," Gottschalck said Thursday. "This is pretty rare."

The Associated Press contributed to this report.