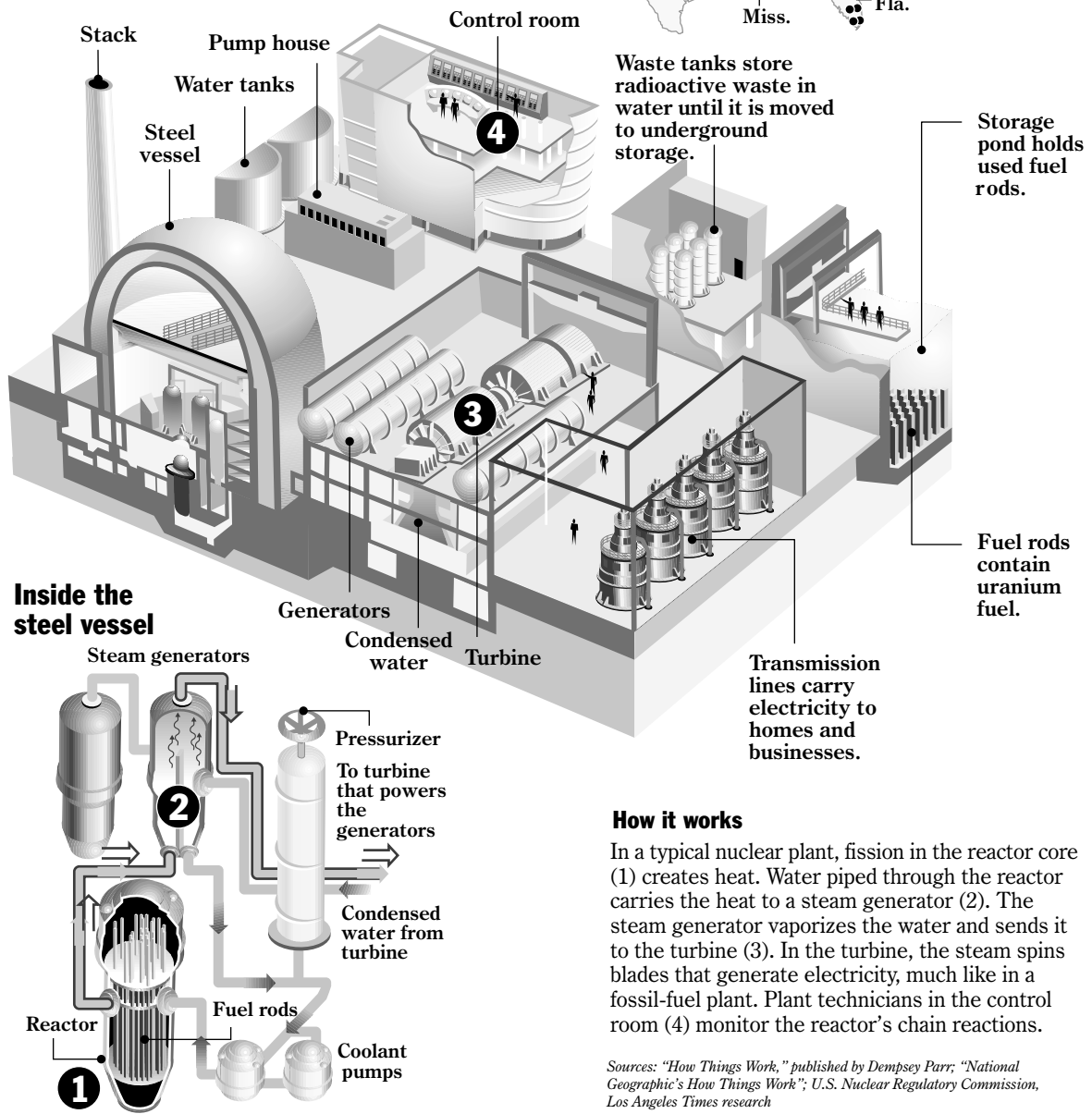
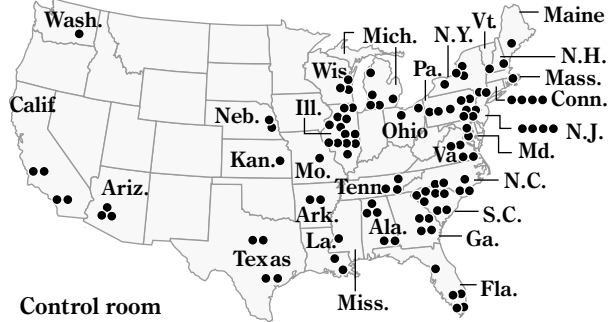


How a nuclear power plant works

There are more than 100 licensed commercial nuclear reactors in the United States, most of them built in the 1960s and '70s. There has been a recent resurgence in the value of these plants. Almost all the reactors in operation in the U.S. are some variation of the reactor illustrated here.

Reactors operating in the U.S.



How it works

In a typical nuclear plant, fission in the reactor core (1) creates heat. Water piped through the reactor carries the heat to a steam generator (2). The steam generator vaporizes the water and sends it to the turbine (3). In the turbine, the steam spins blades that generate electricity, much like in a fossil-fuel plant. Plant technicians in the control room (4) monitor the reactor's chain reactions.

Sources: "How Things Work," published by Dempsey Parr; "National Geographic's How Things Work"; U.S. Nuclear Regulatory Commission, Los Angeles Times research