NRC ponders rule change

Agency changes stance on fire-safety proposal for reactors

BY MATTHEW L. WALD THE NEW YORK TIMES

WASHINGTON - After 10 years of struggling to make reactor owners modify their plants to protect electrical cables from fire, the Nuclear Regulatory Commission is now proposing to amend its own rules, retroactively legalizing an alternate strategy used by many plants but never formally approved.

The change involves the cables that connect the control room with pumps, valves and other equipment needed to shut down

a plant safely.

Previously, the commission wanted the reactors to separate the control cables for redundant equipment, or install fire-detection and suppression equipment or fire barriers, so a single fire could not disable all the cables. It now proposes to accept letting the plants designate technicians who would run through the plant and operate equipment by hand if the control cables had burned away. Under a proposal published in the Federal Register on Wednesday, the commission's staff would not evaluate the feasibility of such a solution; instead, the reactor operators would draw up the plans, test them and keep the results on file for the inspections conducted every three years by the commission's staff.

Among the questions raised by the new strategy is whether workers could get to the equipment through the heat, smoke, radiation and steam that might be present in a fire.

The reason for the proposal, said Sunil Weerakkody, the section chief for fire protection and special studies, is that over the years the commission's inspectors in the field had informally approved such plans or that reactor owners had made such arrangements without asking permission. According to commission documents, some reactor owners simply asserted that they could use such alternate means under the terms of their licenses.

The commission's attorneys recently concluded that these approvals were not legal. The commission could require an application in each case and then evaluate each one, Weerakkody said, but it lacks the resources to do so and still keep up with its other work.

Paul Gunter of the Nuclear Information and Resource Service, a group generally critical of the nuclear industry, said, "The NRC took the word of a noncompliant and noncooperating industry, and set the bar low enough so they could step over it."

Fire has been a concern since March 1975, when a worker at one of the Tennessee Valley Authority's three Brown's Ferry reactors in northern Alabama accidentally set a fire with a candle that he was using to search for an

air leak. The fire made it difficult to operate the equipment needed to shut down the plant and to monitor its condition.

'Manual action'

In response, some plants installed a material called "Thermolag" as a fire barrier, but in the early 1990s, the commission determined that the material was not effective. To compensate, for a time, many plants assigned employees to watch for fire. But many made plans for sending workers directly to the affected equipment, a strategy called "operator manual action."

But the idea of substituting humans for physical protections has attracted some skepticism. In September, at a meeting of the commission's Advisory Committee on Reactor Safeguards, Dana A. Powers, the committee's vice chairman asked: "Is there any hope? It's not like you can set up a simulator and test an operator action."

"How do you simulate smoke, light, fire, ringing bells, fire engines, crazy people running around?" he asked.

A commission staff member, Eva Brown, replied that in some cases, lights could be turned off to make a drill seem more realistic, and inspectors could check preparations by seeing whether air packs were available.