tion in 1980 or 1981 under FEMA's management, according to the DCPA. The satellite to be used, says an official, will have to be powerful enough to enable the use of small ground stations, and the choice has not yet been made. Cost of the overall Emergency Satellite Communications System is predicted by the DCPA to be about $4 million annually for the first five years. □

## Report cards for reactors

For years proponents of nuclear power have touted the safety record of the commercial nuclear industry as being one of the best and as evidence that fission power can be used without exposing the public to any unusually great risks. Nuclear power systems are more carefully designed, constructed, maintained and regulated than any other, according to industry proponents. But the Union of Concerned Scientists disagrees. The nonprofit research group, based in Cambridge, Mass., this week issued two reports which show, it says, that the nuclear industry and its regulators could both do a better job.

The first is a report-card-like rating — "A" for above average, "B" for average and "C" for below average — of the performance of reactors operating in 1976. It was prepared by the Nuclear Regulatory Commission as an experiment for statistically comparing the safety performance of different licensees in such areas as "infractions," "deficiencies," and "noncompliance." Each licensee also received an overall "grade." The grading system was reviewed by an "independent contractor," Oak Ridge National Laboratory, and found to be mathematically and statistically valid.

NRC has no approved rating system now but is considering use of one. How did the powerplants fare in their first report card? Ten got As, 20 got Bs and 10 got Cs in the "overall" category.

The second document is a 71-page report by UCS analyzing and critiquing the NRC safety-inspection process. UCS's Robert D. Pollard, formerly of the NRC, said that "irrespective of how safe reactors are in theory, federal inspectors cannot be sure they are built and operated safely. This report shows the NRC's inspection efforts are biased against enforcement, undermined by political considerations, weak and ineffective."

The report is based on NRC documents and interviews. Among its findings: only one to five percent of the safety-related powerplant activities are inspected; NRC inspectors spend most of their time inspecting utility records, not powerplants; and NRC inspectors have little or no power to force utilities to build plants "to the promises utilities made in obtaining their licenses." □

## Withdrawal syndromes and antipsychotics

The development of tardive dyskinesia — involuntary twitching of the face and extremities — is fairly well documented among some users of antipsychotic drugs. Now, a group of Boston psychiatrists reports that dyskinesia-type problems, among other symptoms, may be associated with *withdrawal* from such drugs.

According to the report in the November AMERICAN JOURNAL OF PSYCHIATRY, essentially two types of dyskinesia may result from withdrawal of antipsychotic substances: "withdrawal" and "covert" dyskinesia. In the withdrawal variety, symptoms that "resemble" TD appear within the first six weeks after withdrawal and last anywhere from one to 22 weeks. Similar to current concepts of TD, "withdrawal dyskinesia is thought to be due to a temporary hyperdopaminergic [an overactivity of dopamine] state in the basal ganglia following the discontinuation of dopamine-blocking antipsychotic drugs," report George Gardos of Boston State Hospital, Jonathan O. Cole of McLean Hospital and Daniel Tarsy of the Veterans Administration Hospital in Boston.

Covert dyskinesia is a similar, but apparently more long-term, phenomenon "that is not detectable during drug administration but develops in response to dose reduction or drug discontinuation, does not disappear spontaneously and may in fact become permanent." Where some patients develop dyskinesia symptoms while taking certain antipsychotic drugs, the researchers suggest that anti dopamine-active drugs actually hide symptoms in persons who will develop covert dyskinesia after withdrawing from the drugs.

While no treatment is needed for most withdrawal and mild covert cases, the psychiatrists advocate the use of cholinergic (acetylcholine-active) drugs and/or dopamine antagonists for severe problems. Primarily, however, they urge that clinicians become aware that persons receiving high doses of antipsychotics "may be developing the neuropathological substrate for tardive dyskinesia, although overt movements are suppressed by the drug. We hope such concern will lead to attempts to reduce dosage whenever feasible," they say.

Other reported symptoms associated with the withdrawal of antipsychotic drugs include temporary, medical conditions such as nausea, vomiting, diarrhea, perspiration, restlessness, insomnia, headaches, rhinorrhea, increased appetite and giddiness. Occasional, temporary parkinson-like movements can occur when antiparkinsonian drugs are withdrawn along with antipsychotics. And finally, some patients become more psychotic when drugs are withdrawn — a condition that may call for the resumption of drug therapy, according to the researchers. Withdrawal dyskinesia, however, should not be mistaken for psychotic relapse, they emphasize. □