

slow because so little is known about the life history, population and ecology of most of the species.

As for the indigenous Eskimo populations of the Arctic, the NAS study stresses the need for more fundamental biomedical and biobehavioral research into such matters as circadian rhythms, sleep, responses to cold and group behavioral patterns.

Unlike the Antarctic, the Arctic is not protected by conservation provisions of a multinational treaty. The report sees a critical need for international accords governing the exploitation of biological resources in the polar seas and coastal regions. "We urge that

every effort be made toward this goal."

Also unlike the Antarctic, the Arctic has not benefited from the existence of any international scientific organization to help stimulate and coordinate research. The international Scientific Committee on Antarctic Research (SCAR) has served in this capacity for Antarctic investigators. Such a formal body for the Arctic would be an immense aid to research in the region, the NAS study concludes.

Although no formal recommendation is made, the group emphasizes that "the promotion of expanded international scientific cooperation in the Arctic is a critical need." □

## RADIOACTIVITY

### A question of jurisdiction



Earl Chambers/NSP

*Monticello: Test case for Federal or state control of nuclear power plants.*

Before a nuclear power plant can begin operation, it must run a gamut of regulations, applications, permits, licenses and hearings. By the time the plant is ready to receive its operating license, most of the hurdles have been cleared and the rest are mainly routine. Since hearings on applications for an operating license are not mandatory, the Atomic Energy Commission rarely holds them.

But next week in St. Paul, Minn., a preoperating license hearing will be held. The unusual step is being taken because of the controversy over the Monticello nuclear generating plant, now 98 percent complete three miles from the village of Monticello, Minn. The hearing will establish a full record behind the permit, but will not settle the larger question.

At stake is the issue of who holds jurisdiction over nuclear power plants: the Federal Government or the individual states.

The Minnesota Pollution Control Agency claims it has the right to set

limits for radioactive effluents. Northern States Power Co., the plant owner, maintains jurisdiction rests with the AEC, it cannot function under dual control, and has taken the issue to Federal court where the case is pending.

Barring any new information at next week's hearing, the AEC is not likely to deny the operating license, since any plant must comply with AEC limits to begin with. All the utility company has to do is show that it has adequately described the plant and that its operation is designed to provide protection to the public health and safety in accord with AEC guidelines.

Although both the company and the state agency will participate at the hearing, the Pollution Control Agency will be holding its fire until the court case comes up some time toward the end of May. The issue then will boil down to one of states rights. The state agency bases its authority on the state statutes that established it. According to state law, the agency has the right to regulate all wastes, industrial, sewage "and other

wastes." The PCA takes that key phrase to include nuclear effluents and, acting accordingly, has set much lower limits than those of the AEC.

Northern States Power contends that the authority to regulate radioactive wastes resides where Congress put it: with the Atomic Energy Commission. And so it will be up to a Federal court to settle the issue.

Depending on the outcome of the battle is a second case, also pending but in a state court. This time the argument is over the reasonableness of the limits set by the agency. However, this case is being delayed pending the outcome of the Federal court action since a decision there favorable to Northern States would make the state action unnecessary.

Specifically, that issue is over gaseous effluents. Both sides agree that radioactive liquid wastes (SN: 3/28, p. 312) are no great problem and that the utility can meet the limits set by the agency without too much trouble. But for gaseous effluents, Northern States contends the limits are too stringent.

"Technically speaking, we cannot be sure of meeting the limits," says Arthur Dienhart, assistant vice president of engineering for Northern States Power Company. "As pointed out in the presently drafted stipulations submitted to the PCA, we see no way of being technologically certain of meeting the limits in the PCA permit as written."

John Badalich, executive director of the PCA, sees it another way: "We feel that technically plants can operate at the levels we have set. We can prove it, and we certainly will."

AEC regulations call for stack emissions of 7.5 million curies per year. The state agency wants 315,000. But the power company protests that the state restriction would be much greater than the numbers indicate; the agency wants the measurements made at the stack instead of the site boundary, where atmospheric dilution and dispersion attenuate the levels.

Meeting the agency's limits would require the installation and construction of more filtration equipment and storage tanks to separate and hold up the contaminated gas so radioactive decay can go to work to cut down the levels (SN: 4/4, p. 341). Although there is no guarantee that the limits will be met, the agency and Northern States are negotiating the matter, and Badalich is optimistic about reaching an agreement.

"We've got them to a point where they might provide off-gas storage containment, enabling another 48 hours decay," he says. Although not as sanguine, Northern States officials concede that some sort of agreement can be reached. □