position. Indeed, one wonders why a company that must sell two partly finished generating plants to the state to avoid bankruptcy is eagerly committing itself to a new project that might cost up to \$750 million dollars. This is especially puzzling when combined cycle turbine units offer an alternative that could be installed in modest and more easily financed increments.

This alternative was first presented in a paper late last year by two staff professionals of the New York City EPA, Charles Komanoff, a senior quantitative analyst, and Ken Semmel, deputy counsel. Although neither is still with the agency, Komanoff and Semmel continue to argue for the combined cycle turbine system. In a just released revision of their earlier paper, they contend that recent improvements in the technology of turbines and heat recovery boilers give their proposed alternative an even greater advantage over the Cornwall pumped storage system than they had first realized.

The comparative "heat rates" (number of Btu's required to generate 1 kilowatt-hour) for the proposed Cornwall plant and the combined cycle

units are said to make a strong case for the latter.

For Cornwall, the heat rate is put at 12,420 Btu/kw-hour, based upon an incremental heat rate of 9200 Btu/kwhour for baseload fossil fuel plants (if nuclear units were used to provide the pumping energy the rate would be higher) and an efficiency ratio of 1 kilowatt of hydropower for every 1.35 kilowatts of pumping energy. For the full combined cycle system, using lowpressure steam turbines to generate more power with waste heat from the gas turbines, the heat rate would be 9100 Btu/kw-hour. For a truncated combined cycle system, with the steam produced from the waste heat to be sold directly to Con Ed's steam customers, the heat rate would be down to 4655 Btu/kw-hour. If these numbers are correct, the Cornwall project would be by no means the most efficient available source of peaking energy.

On top of everything else that may ultimately persuade Con Ed to give up the Cornwall project is the fact that, besides the reopening of the FPC hearings, it must now also submit to an entirely new and separate permitting proceeding. On 10 June, the Second Circuit court affirmed a lower court ruling that, under Section 404 of the Water Pollution Control Act of 1972, Con Ed has to obtain a permit from the Corps of Engineers before any rock fill can be deposited in the Hudson River. Several federal and state agencies, including the office of the New York State Attorney General, are indicating that at the Corps' permit hearings a number of the same issues that have been fought over since 1965 will be raised anew.

Con Ed officials could hardly feel anything other than exasperation at the interminable, convoluted proceedings in which they are enmeshed. Nevertheless, the fact that certain of the key issues in *Scenic Hudson* remain unresolved after almost 10 years of litigation is perhaps more fairly attributed to the intrinsic difficulty of those issues than to faulty or redundant laws and procedures.—LUTHER J. CARTER

## APPOINTMENTS

Robert A. Plane, former provost, Cornell University, to president, Clarkson College of Technology. . . . Joseph M. Zannetti, Jr., executive assistant for public affairs, Sandia Laboratories, to president, University of Albuquerque. . . . William H. Patterson, provost, University of South Carolina, to president of the university. . . . Jerald C. Walker, vice president for university relations, Southwestern University, to president, Baker University. . . . Oakes Ames, chairman, physics department, State University of New York, Stony Brook, to president, Connecticut College. . . . Orville G. Brim, Jr., former president, Russell Sage Foundation, to president, Foundation for Child Development. . . . Frank T. H. Rhodes, dean, College of Literature, Science and the Arts, University of Michigan, to vice president for academic affairs at the university. . . . Leonard Laster, executive director, assembly of life sciences, National Academy of Sciences, to vice president for academic and clinical affairs and dean, College of Medicine, State University of New York Downstate Medical Center. . . . Alfred J. Bollett, chairman, medicine department, Medical College, Georgia School of Medicine, to chairman, medicine department, Downstate Medical Center, State University of New York.

## Briefing

## Land Use Bill Appears Dead for this Congress

Land use legislation is apparently dead for the remainder of the 93rd Congress, and its sponsors have small hope of reviving it until the Watergate scandal and the presidential impeachment issue have been resolved. The land use bill, after finally being reported to the House floor from the Rules Committee where it had been stuck (Science, 22 March), was rejected on 11 June when the House voted 211 to 204 not to take it up.

Representative Morris Udall (D—Ariz.), chairman of the Interior subcommittee on environment and the leader on land use legislation in the House, later joined Senator Henry M. Jackson (D—Wash.), sponsor of the land use bill passed by the Senate, in a postmortem news conference. Jackson and Udall agreed that the legislation was stymied because, as Jackson put it, it had become "an expendable

pawn in the White House trading game of impeachment politics."

Until a few months ago the Nixon Administration had supported land use legislation similar to the Jackson and Udall bills. In fact, it was at the Administration's uraina that those bills emphasize the need for the states to assume ultimate responsibility for control of critical areas, such as wetlands or the area around a major airport, and critical uses, such as the development of a new community or a major industrial facility. The President did not withdraw his support for the legislation until after a meeting in early February with Representative Sam Steiger (R-Ariz.) and a dozen other Republican "hard hats" of the kind Nixon seems to be looking to for help in escapina impeachment.

Senator Jackson hopes to save his land use bill by having the Senate attach it to some unrelated House-passed measure in which the White House has an interest. But Udall, although willing to have a go at this strategem, is not optimistic.—L.J.C.

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