

Sweeping reforms urged for US energy labs

Washington. Comprehensive reform in the way in which the US Department of Energy (DoE)'s 10 national laboratories are managed seems likely to follow the conclusions of a high-level task force, published in Washington last week, that the present system is broken beyond repair.

The task force was chaired by Bob Galvin, chairman of Motorola, and calls for the "corporatization" of the national laboratories. This would detach them from direct supervision by the DoE and allow them to operate like industrial corporations, but under the control of a government-appointed board of trustees.

The task force suggests that legislation that places special restrictions on the laboratories should be repealed, and that funding should be allocated by Congress as separate line items for each of their four main missions, national defence, energy, basic research and environment. It also recommends a gradual reduction in federal funding, claiming that the new structure would make the laboratories between 20 and 50 per cent

more efficient.

The task force's report paints a picture of 10 laboratories filled with competent people and good equipment but overburdened with hundreds of supervisory staff, hundreds of thousands of pages of unnecessary documentation and auditors "descending daily, often by the dozen" to pursue requirements laid down by the DoE or Congress.

As the findings of the report sunk in, some laboratory sources expressed concern that Congress is likely to seize upon the task force's assertion that the laboratories could cost less, and cut their \$6-billion budget without bothering to go through the more exacting process of drafting and passing legislation to reduce the regulatory burden on the laboratories and set up a new management structure responsible for their operation.

But congressional staff on both sides warmly welcomed the Galvin report, predicting that, with strong Republican sup-

IMAGE
UNAVAILABLE
FOR COPYRIGHT
REASONS

Early days: Los Alamos Laboratory has changed dramatically since the Second World War.

port, legislation to reform the governance of the laboratories could be prepared this year and passed in 1996.

"This is a golden opportunity," says John McTague, vice president of technical affairs at Ford, a former acting science adviser to Ronald Reagan and a member of the Secretary of Energy Advisory Board (SEAB), which formally received the report of the task force last Wednesday. "I think a substantial overhaul is called for," says McTague. "But if it isn't done in 18 months it won't be done at all."

But McTague warned SEAB against following the British example — cited in the report — in which the Atomic Energy Authority laboratory at Harwell, Oxfordshire, is being prepared for privatization. Citing his "long experience" of the Harwell laboratory, he says that it has been "unfortunate to see the long-term science base of that facility wither away".

Galvin says that he sees "corporatization" as meaning that the laboratories would be run by "a corpus body separate from government". The government, he suggests, "could own the corporation if it wants to — but it will turn the governance over to the board of trustees". The concept needs refining, concedes the man who ran Motorola from 1959 to 1990, and who still chairs the company's executive board: "If I get some encouragement, I'll do a little study to understand better how it can work."

Hazel O'Leary, the energy secretary, who probably expected a less searing indictment of her department when she appointed the task force a year ago, gave its findings a muted welcome. But she initially rejected the "corporatization" of any of the 10 multi-purpose laboratories examined by Galvin. "I see that recommendation as the most extreme in the report," she says. "The single-purpose laboratories are natural for that, [but] we wouldn't submit the 10 big laboratories to such an experiment."

The Galvin findings may be adversely affected by unfamiliarity of many new Republican staff in Congress with the task force, who may therefore ignore its

What the Galvin report said on:

Governance: "The principal organizational recommendation of this Task Force is that the laboratories be as close to corporatized as is imaginable."

The old model "is broken and should be replaced with a bold alternative. Incremental solutions will not likely provide the major improvements that are, at once, achievable and necessary."

The new model: "We do not presume to know what the precise alternative architecture should be One attractive model is a new not-for-profit R&D corporation or corporations ... governed by a Board of Trustees, consisting primarily of distinguished scientists and engineers and experienced senior executives from US industry."

The British example: "Insight should be gained from the experiences of other nations, including the United Kingdom, which recently has maneuvered a disengagement of several of its government laboratories into a semi-privatized status."

Cost savings: "[Governance reform] could be expected to result in an improvement of between 20 and 50 per cent in the effectiveness of the laboratories themselves, on top of significant staff and overhead savings in the Department [of Energy]."

Nuclear weapons laboratories "may not be appropriate candidates for transfer to a non-federal governance structure. Some task force members think they are. Some think they are not."

Basic research: "The task force is con-

cerned about what appears to have been a significant decline in DoE funding for fundamental research over the past three years, with the prospect of still deeper cuts to follow. The department should sustain and strengthen its support of fundamental science."

Industrial competitiveness: "The industrial competitiveness activities at the national laboratories are unfocused and lack a firm policy foundation. Industrial competitiveness, broadly defined, has no place as a stand-alone mission of the laboratories The idea that the laboratories are, or could become, cornucopias of relevant technology for a broad range of industries is a myth."

Environmental management: "the bulk of environmental challenges ... are becoming calcified, and the vast flow of funds into the program acts like an anesthetic, numbing the Department, State regulatory agencies and affected stakeholders, hindering and delaying beneficial change."

Lawrence Livermore National Laboratory (LLNL): "LLNL should retain enough nuclear weapons design competence and technology base to continue its activities in non-proliferation, counter-proliferation, intelligence support, and verification, and to provide independent review [of work at Los Alamos]. LLNL would transfer, as cost-efficiency allows, over the next five years its activities in nuclear materials development and production to the other design laboratory [Los Alamos]." □