$11.3 billion budget, for which the Administration has requested a 4% increase in 1996? Senate budget committee staffers, who reportedly are forecasting a 10% cut, were not available to discuss details. However, NIH's own financial experts are saying that the cut could reach 18% in non-AIDS programs if all of Domenici's stipulations are followed. Faced with such uncertainty, many people threw up their hands. For example, Assistant Secretary for Health Philip Lee said: "We can't figure out from what [Domenici's staff] have said what they really mean. That's one of the problems. If they said, 'We're going to cut the NIH budget 10%,' the public would react strongly. ... But they've fuzzed it up."

Whatever the final outcome in the budget resolution, NIH can expect more sympathetic treatment from the appropriations committees. In particular, Senator Mark Hatfield (R–OR), chair of the full appropriations committee in the Senate, is expected to fight against major cuts in NIH's budget.

■ *NSF:* The picture is somewhat clearer at NSF, where the resolutions contain comparatively good news for the foundation as a whole but bad news for social and behavioral scientists. Both the House and Senate versions incorporate the $200 million reduction from current levels already requested by the Clinton Administration for academic facilities and major research equipment. The Senate version would lop off $100 million this year from NSF's $2.2 billion research account and hold to that level for the rest of the decade, while the House version would make only a $17 million cut in 1996 and then add about $65 million each year through 2002. The $600 million education program would remain at that level in both versions.

However, the House proposal takes aim at the foundation's $110 million directorate for social and behavioral sciences and economics, with Walker accusing NSF of funding "politically correct" studies out of line with its physical sciences core. In response, Howard Silver, executive director of the Consortium of Social Science Associations, points out that such studies include work cited by conservatives as well as liberals, including analyses of the high economic rate of return from federal spending on basic research and the economic underpinning for the government's billion-dollar auction of radio frequencies.

The proposed reductions leave NSF officials wishing fervently for the Administration's request for 7% growth in research. "We'd love to have that number for 1996," says Anne Petersen, NSF's deputy director. "But we know it's going to be a fight to get it."

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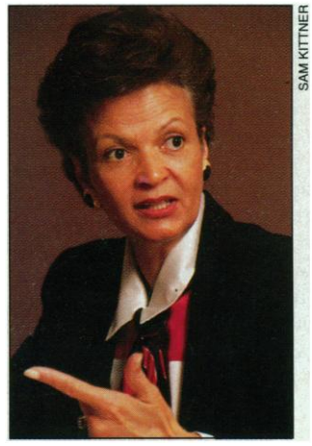
SCIENCE INTERVIEW

... As O'Leary Struggles to Preserve Energy Department

With her corporate polish and soft Virginia accent, Energy Secretary Hazel O'Leary might not look or sound like a formidable Washington infighter. But in her 2 years as head of the sprawling Department of Energy (DOE), O'Leary has proved to be a tough adversary in any political battle. She will need all of those skills in the weeks and months ahead if she is to fend off Republican plans to dismantle her department.



SAM KITTNER

Pointed comments. Energy Secretary Hazel O'Leary rebuts efforts to eliminate DOE.

In an interview with *Science* on 11 May—the day the House Budget Committee voted to abolish DOE—O'Leary dismissed the committee's proposals as "unsophisticated" and "anti-science." She also vowed to hold together the diverse missions of her department.

She won't have to do it alone. The chair of the Senate Budget Committee, Senator Pete Domenici (R–NM), is a strong DOE defender who is on good terms with the secretary. And his committee's version of the budget resolution, which lays out a plan to balance the federal budget by 2002, is similar to the realignment scheme O'Leary announced the week before (*Science*, 12 May, p. 794).

"It's not a shocking fact that two of our major national laboratories are in the state of New Mexico," O'Leary says with a smile. "The budget mark that he has put forward is much more compatible with the thinking of our Administration and certainly my personal thinking. We can work with one another."

Her political savvy has already won some important victories. In 1993, for example, she successfully led a coalition of arms control advocates both inside and outside the Administration that persuaded President Clinton to extend a moratorium on nuclear testing in the face of opposition from the national security community, including the directors of DOE's weapons labs. And she has established a reputation for openness within the notoriously secretive department by revealing details of human radiation experiments conducted by the U.S. government for decades.

The past 12 months, however, have been devoted to the thankless task of trying to unify and streamline DOE. It's an $18 billion agency with 27 labs that, among other things, decode the human genome, explore the origins of matter, design nuclear weapons, investigate global change and alternative energy sources, and tend to a half-century of environmental degradation.

A former utility executive who served in the Ford and Carter administrations, O'Leary is not a typical technocrat. She eschews the acronyms that abound in her field and takes stock in the results of public opinion polls. But associates say her poised manner can give way to a sharp temper and a proclivity for swearing behind closed doors. She admits to counting the days she has been in office, but says she plans to remain in the Cabinet at least until the end of Clinton's first term, giving her another 18 months—assuming her department survives that long.

What follows is a transcript of O'Leary's remarks made during her visit to *Science*'s editorial offices, edited for brevity.

–Andrew Lawler

On the House Republican budget plan.

O'Leary: It's bad news for the nation, not just for the Department of Energy, because it's bad news for basic and applied science. Basic science would take a 35% cut—that's 6 billion bucks over 7 years. It almost gives the appearance that the people involved in this exercise had no idea of the value science has, or what it has contributed. It's just shortsighted and foolish.

These [budget levels] simply mean that programs would have to fold en masse. If we withdraw the opportunity to establish scientific procedures for testing nuclear weapons [without exploding them], how can we make greater reductions in our nuclear warheads? We can communicate this very clearly to the American public. Every poll I have read says the public would like to see us downsize our nuclear stockpile.

On a Department of Science [a proposal being pushed by House Science Committee Chair Robert Walker (R–PA) to lump parts of DOE together with nonbiomedical research agencies into a Cabinet department].

O'Leary: It is counterintuitive to everything I know about managing organizations and managing basic science. This monolith of some seven or eight pieces of departments and agencies weighs so much that I doubt one could manage it. We're told [it would have] 77,000 federal employees, but that does not account for the contractors. If I count those who work for the Department of Energy, the Environmental Protection Agency, and NASA, we're coming close to a quarter of a million souls. Who would want to manage that? And imagine as a scientist having to deal with that monolith.

Chairman Walker is very supportive of basic science. I don't believe, with the highest level of respect, that he has really thought through how you manage large organizations. This thing would be bigger than the Department of Defense! It also would set up a fiefdom where one committee with one chairman—or two, if you consider both houses—begins to make all the decisions about basic science and technology for this nation. We need the healthy competition.

This is an idea whose time has not come. And there are many congresspeople on both sides of the aisle who have come to understand that this is an ineffective, inefficient, overly bloated creation dusted off from another era.


SAM KITTNER

"Neutrinos have mass. Great, now why does my mother care? We can't be so bright that we do not spend time engaging the public. I can't do this alone."
—Hazel O'Leary

On the national laboratories.

O'Leary: We should look into the work of the national laboratories, understand where there are redundancies, and strip them away. I have never said we should support all of these labs. I believed when I first came into this job it would be a far simpler matter to look at a lab and to move its programs. I have since learned with the sophistication that comes from dealing with the many stakeholders that that is not a thing done quickly. But I think there is an opportunity for consolidation, and we will put the pieces together for our 1997 budget.

On halting weapons design work at Lawrence Livermore National Laboratory.

O'Leary: I'm not comfortable with that [proposal, by a panel chaired by Robert Galvin]. We have to ensure the national security community that this new way of doing business provides them the level of comfort they want. I don't think we do that today or in the next 5 to 6 years by withdrawing the competition among the two laboratories—Los Alamos and Livermore—that has given that community a high level of comfort.

On major new science facilities.

O'Leary: We must [ensure] we're not schnookering the public or the Congress about the cost of these facilities. What took down the Superconducting Super Collider was the fact that the cost kept increasing. I make people go back and refine their economic analyses to the standards in the real world. The time I took to come to a decision on the National Ignition Facility [a laser fusion facility planned for Livermore] annoyed a lot of people. But we had to be certain about the cost and the environmental impact—I don't want to litigate this in public.

But we can only go forward if the public understands the value of these projects. And I'm not Superwoman. I don't wake up and say, Dammit, I'm going to take on the Congress. You've got to have a lot of people on your side.

On the fusion program.

O'Leary: The fusion program was in trouble when I arrived. Think back to last year, when Senator Bennett Johnston (D–LA) was bound and determined to put a stop to the program because he did not see a path forward. I engaged then in a very difficult and time-consuming negotiation with the scientific community. We have begun to realize that many of these large projects need to be international, like the Superconducting Super Collider should have been from the start. We will come to a decision about the funding levels in time for the 1997 budget.

On environmental cleanup.

O'Leary: In my first few months, I realized [in the case of cleaning up the nuclear production facility at Hanford, Washington] we had made an agreement with the state that we couldn't keep. ... Are we going to clean up each one of these sites so they become green fields where young children can picnic with their families? There's not enough money in the country to do that. There's probably not enough money in the world to do that. So we will go after the worst messes first. The question is whether we can hang on to a budget that permits us to drive the technology to help us improve our pace and depth of cleanup so we can do better every time for less.

On a theory, suggested by Los Alamos researchers, that plutonium from nuclear wastes at the Yucca Mountain repository could migrate and cause a chain reaction.

O'Leary: Somebody knew it was budget time and leaked this to *The New York Times*. But the one thing I have learned is you want to let that free thought at the labs be unleashed. Let's see this work finished and submit it to peer review. ... And we need legislation this year [to move ahead with an interim storage facility]. I am being sued now by, I think, 18 states, 17 utilities, 22 state utility regulatory commissions, and several states' attorneys general. They feel they have paid into the nuclear waste fund for years without results or a timetable. The needs of the utilities become critical about 2001 or 2002. It is one of my highest priorities this year.

On science and DOE's mission.

O'Leary: Our major mission has never been energy. From the very beginning it has been national defense work. The outgrowth of that is the environmental management program resulting from the safety, health, and environmental problems resulting from the production of nuclear weapons. The science and technology have always been the supporting base. Almost the tail wagging the dog was the energy piece put into [the department] simply because of the [energy] crisis.

Programs like the human genome have become an integral part of the intellectual muscle of the laboratories which I would not like to see stripped away. Over time will that happen? Possibly. I am not going to stand and defend every programmatic responsibility of the department. But today it is operating in a very cohesive way, certainly much more cohesively than I found it.

On public support for science.

O'Leary: The scientific community must work with real live people so they are conversant and understand the long-term benefit of research. I can't even articulate it. Neutrinos have mass. Great, now why does my mother care? We can't be so bright and so know-it-all that we do not spend time engaging the public. I can't do this alone. ■