

PRESIDENT CLINTON PICKS JOHN GIBBONS AS SCIENCE ADVISER TO REINVENT POLICY

In selecting John H. Gibbons as his science adviser and director of the White House Office of Science and Technology Policy, Bill Clinton, then President-elect, made both symbolic and serious statements. Clinton introduced Gibbons during a TV broadcast on Christmas Eve from Little Rock, Arkansas, along with members of his new Cabinet. By naming his science adviser much earlier in a new Administration than Washington science wonks can recall, Clinton emphasized the importance he assigns to the post and enabled the adviser to have a say in some 60 appointments to science and technology slots in executive agencies. The choice of Gibbons, for the last 13 years the director of the Office of Technology Assessment, a low-profile "think tank" of Congress, suggests that Clinton sought an adviser steeped in the issues studied by the little agency and greatly respected on Capitol Hill for his political judgment and managerial skills.

Clinton praised Gibbons for his uniqueness as he announced the appointment. "In making these very complex decisions about the economy and the environment, about what can be done today and what must be done tomorrow, it is profoundly important that the President have a

science adviser who understands science, who understands technology, who understands the practical application of these disciplines to the myriad problems we face today," said Clinton. "And I can tell you that from Al Gore on down to every other member of Congress I have discussed John Gibbons with, I have hardly ever received more glowing and consistent recommendations for anyone."

It was Gore, as Vice President-elect, who recommended Gibbons to Clinton. As a member of first the House and then the Senate, Gore was one of OTA's most loyal customers on issues involving technology, environment and the social implications of biotechnology. Gore and Gibbons share commitments to environmental protection and energy conservation, as well as a connection with Tennessee.

Research in nuclear structure

After receiving his PhD in 1954 from Duke University, where his adviser was Eugen Merzbacher (now at the University of North Carolina), Gibbons spent 15 years in experimental nuclear physics at Oak Ridge National Laboratory in Tennessee, Gore's home state. Gibbons's early studies of nucleosynthesis of heavy elements involved measuring neutron absorption cross sections in the energy range of 5 to 220 keV. The techniques used and results found proved important to nuclear theory and engineering, as well as to understanding nucleosynthesis in stars and neutron capture in nuclear reactors. In the late 1960s, Gibbons began studying energy efficiency and conservation years before most people considered such subjects important. In 1969 Oak Ridge's director, Alvin Weinberg, chose Gibbons to head the lab's environmental program.

Then in 1973, at the start of the nation's traumatic energy crisis, brought about by a shutoff of Middle East oil, Gibbons was appointed the first director of the Office of Energy Conservation in the Federal Energy Administration. While there he launched a major research and demonstration program on energy effi-

ciency, which eventually contributed to reducing the nation's energy consumption per unit of GNP.

In 1974 he set up the Energy, Environment and Resources Center at the University of Tennessee. During his five years as its director he served on many Washington advisory committees examining energy issues, including the National Academy of Sciences-National Research Council Committee on Nuclear and Alternative Energy Systems. As chairman of the CONAES panel on conservation, Gibbons whipped out his section of the report within the first year and was forced to wait another 18 months before he was allowed to publish so that the other panels might catch up.

Largely because Gibbons had been successful in explaining energy issues so clearly and succinctly to members of Congress, he was summoned to revive a moribund OTA when the US was traumatized by another oil crisis in 1979. Congress had created OTA in 1972 as an experiment. Governed by a bipartisan 12-member board consisting of six senators and six representatives, OTA was expected to work for committees of Congress by providing analytical studies of the social, economic and political implications of scientific and technological developments. From its outset, OTA was regarded by the Nixon Administration as an adjunct to Senator Edward Kennedy's liberal agenda and Presidential aspirations. Amid carping about its partisan tilt, Kennedy's hand-picked management, and cost overruns on several studies, OTA was about to be dismantled when Gibbons arrived.

Under Gibbons, OTA has earned a reputation for producing reports that broaden and clarify the debate on a wide range of issues, such as renewable resources, genetic engineering, electronic surveillance, medical technology, the Strategic Defense Initiative, fusion power and precollege education. Its major reports leave little unsaid about a subject. They array the policy options uninfluenced by political expediency or ideology.

To his credit, Gibbons never used



AP/WIDE WORLD

Gibbons: A new job "when I grow up."

any of OTA's more than 500 reports as a platform for his own views on science and technology. He brings a fundamentally different perspective to OSTP. "Jack Gibbons may be the only person in the history of science advising who has actually been trained for the White House job," says Representative George Brown Jr of California, chairman of the House Committee on Science, Space and Technology and former chairman of OTA's advisory board.

This was apparent at the confirmation hearing for Gibbons before the Senate Committee on Commerce, Science and Transportation on 26 January, six days after Clinton's inauguration. The weekend before the hearing, Gibbons prepped with OTA colleagues who shot tough questions at him for two hours. In the event, the Senate session could be characterized as a two-hour love fest.

Gibbons was introduced to the committee by three senators who praised his experience and personality. Kennedy, who is once again chairman of OTA's board, said Clinton had made "a brilliant appointment." Similar sentiments were expressed by Charles Robb and John Warner, who represent Virginia, where Gibbons resides. Robb recalled that in questioning Gibbons the previous day, he learned they had common ancestors who lived in the state some 200 years ago. Gibbons still operates a farm near The Plains, in the foothills of Virginia's Blue Ridge Mountains.

Tribute to a predecessor

In his prepared statement and in answer to questions from committee members, Gibbons described how he and the President thought about the job and about issues in science and technology. Gibbons said he plans to "build on the impressive progress of my predecessor [D. Allan Bromley]. I want to be a catalyst for the true integration of science and technology

across the executive branch." In this connection, he intends to extend the use of the interagency Federal Coordinating Committees for Science, Engineering and Technology, known familiarly as FCCSET. In this connection Gibbons expects his close relationship with Gore will make convening and coordinating FCCSET activities much easier and more effective.

Gibbons described himself to the Senate committee as "only one voice" and "the honest broker" who will provide perspectives on science and technology for the President. On the subject of Gore, Gibbons said Clinton has delegated to the Vice President—"and I think properly and I'm enthusiastic about this"—the leadership role on issues involving the environment and technology.

Creating a civilian agency modeled upon the Defense Advanced Research Projects Agency, a strategem Clinton had advocated during the election campaign as a way of strengthening high-technology industries, no longer appeared high in White House priorities. In response to a question about this, Gibbons said that the concept was "appealing" but "it seems to me the most opportune way to go is to fully utilize the resources that we already have." He favored expanding the National Institute of Standards and Technology. When Senator John Danforth of Missouri suggested that many Federal labs had outlived their original purposes and that funds for them might be better spent for university research, Gibbons replied cautiously that, with the end of the cold war, "time has caught up... with some of the largest of the labs." He said the labs need to be reviewed not only by their sponsoring agencies but by non-Federal groups that might be potential customers for R&D. Danforth's questions about "downplaying" basic research in the rush to promote marketable technologies brought forth a spirited defense of

researchers. "Our problem is not our science at the bench," said Gibbons, "but what happens downstream."

Gibbons had stated earlier, when discussing his experience, "an appreciation of what it takes to transform a technical innovation into a product and to successfully manufacture, sell and service it, while generating sufficient profit to stay ahead of the inevitable competition." Although he didn't elaborate on this, he might have noted that he was one of six Oak Ridge who conceived one of the first spinouts from a national lab—the creation in 1962 of ORTEC, a maker of solid-state detectors and other devices. The firm is now part of EG&G.

Confirmed by the Senate after dinner on 29 January, Gibbons was sworn in without fanfare on 1 February by a notary public hustled to his office in the Old Executive Office Building. Despite the inglorious start, Gibbons immediately plugged into the White House power structure. He has been working 80 to 85 hours each week, attending all Cabinet meetings at the White House and Camp David, participating in budget discussions in the Oval Office and the Office of Management and Budget, and giving his views at daily sessions of the National Economic Council on stimulating investment and on reducing budget deficits. This involvement is strikingly different from that of previous science advisers.

The new OSTP will include the functions of the National Space Council and the Critical Technologies Council. Gibbons has been asked to consolidate both operations into OSTP. Unlike some of his predecessors at OSTP, Gibbons believes that words count. Accordingly, he plans to discuss issues regularly with Congress and the news media. "In times past I wondered what I wanted to do when I grow up," he said at his confirmation hearing. "This new job is just that."

—IRWIN GOODWIN

MASSEY LEAVES NSF AT CRITICAL TIME FOR UNIVERSITY OF CALIFORNIA POST

Within months after Walter E. Massey took charge of the National Science Foundation in March 1991, some staffers began betting on how long he would stay before he was lured away to a prominent university. A year ago, when scuttlebutt increased about Massey's imminent departure, he told reporters that he intended to serve out his entire six year term. So it came as a surprise

when Massey announced to his staff on 27 January that he would be leaving at the end of March to become the senior vice president for academic affairs and the provost of the University of California system. At his departure, he will have rounded out just two years, making his tenure one of the shortest in NSF history.

Massey's departure comes at a critical time for NSF. While the agency is

currently operating with an annual budget of \$2.7 billion, 6% more than the previous year, its research programs are getting \$1.8 billion of the total, almost 1% less than in fiscal 1992. Some of NSF's research divisions, including physics, astronomy and mathematics, were clobbered by the budget axe—a situation that left Massey the focus of acrimonious attacks. In fact, several divisions—