President Trump has taken longer than any modern president to name a science adviser, according to an analysis from The Washington Post, leaving vacant a post tasked with providing scientific guidance even as his administration has proceeded with science-related decisions.

The White House science adviser, a prominent position for every president since the Eisenhower administration, is responsible for giving the president scientific and technical advice in “areas of national concern,” according to a 1976 law that codified the role — which cited spheres ranging from national security to the environment.

More than 8 months into his first term, Trump has not nominated anyone to the position. Once selected, Trump’s nominee would require Senate confirmation, which could take weeks or even longer as Congress addresses a string of other contentious, time-consuming debates.

“I know that the president has committed to appointing a director, and a short list of qualified candidates have been narrowed down,” said a White House official, who was not cleared to speak for attribution, in response to The Post’s analysis. The official said that while it lacks a director, the White House Office of Science and Technology Policy does have more than 40 staffers in place, “including expertise in natural disasters, energy, nuclear, national security.”

Still, the long-standing vacancy contrasts sharply with Trump’s predecessors. Former president Barack Obama nominated John Holdren, a Harvard physicist and energy expert, on Dec. 20, 2008 — a month before taking the oath of office. Holdren was confirmed by the Senate on March 19, 2009, about two months into Obama’s first term.

Former presidents John F. Kennedy, Richard Nixon and Bill Clinton all also named a science adviser before taking office, with Nixon being the quickest to pick his; he named a nominee just 28 days after being elected. President Ronald Reagan waited four months after his inauguration to name his adviser. President George H.W. Bush waited three months. President Jimmy Carter took two.
Even the modern president who previously waited longest to name a science adviser, George W. Bush, moved more quickly than Trump by a significant margin. Bush named physicist John Marburger for the role in June 2001 and officially submitted him for confirmation on Sept. 21, 2001.

“There’s little room for doubt that the Trump administration’s priorities do not include science and technology, in sharp contrast with every president, Republican or Democrat, since World War II,” said Neal Lane, a physicist at Rice University who was Bill Clinton’s second science adviser. “Not only had previous presidents chosen science advisers well before this point in their first terms, many of them had already laid out their strategies for ensuring that the U.S. remained a leader in science and technology.”

Despite lacking a science adviser, Trump has moved forward with a number of controversial, high-importance decisions that have prominent scientific components to them.

Indeed, it is notable that Trump’s speech abandoning the Paris climate agreement did not address the fundamental science of climate change, even though he was making a decision about how the United States would deal with an issue principally scientific in nature. A trusted science adviser might have changed that.

A number of other Trump decisions — on matters ranging from responding to hurricanes to dealing with Iran’s and North Korea’s nuclear programs — also have key scientific elements to them.

Meanwhile, although Congress probably won’t go along, the Trump administration has also proposed radical cuts to federal science budgets, even in previously protected areas, such as medical research. Typically a science adviser would also be heavily involved in any such proposals.

The administration is also considering changing or scrapping an international agreement regarding Iran’s nuclear weapons program, where questions of whether Iran is complying with the agreement hinge on details of the refinement of radioactive materials and other nuclear machinery. Obama’s energy secretary Ernest Moniz, who joined the administration after serving as a professor of physics and engineering at the Massachusetts Institute of Technology, was closely involved in negotiating the deal.

Presidents Lyndon B. Johnson and Gerald Ford were not included in The Post’s analysis, as they did not take office after being nationally elected. Such a situation makes comparison difficult, as many appointees were already in place. Johnson assumed office following Kennedy’s assassination; Ford took office after Nixon resigned.

Trump’s delay is creating growing concern among the scientific community, as well as puzzlement over why the president doesn’t simply pick a scientist who is sympathetic to his political agenda, as past presidents have done. Shortly after his election, Trump did meet with conservative-leaning scientists such as Yale’s David Gelernter and Princeton’s William Happer, suggesting that this outcome could be likely.
“All of them, I think it’s probably safe to say, appointed somebody who was more or less in agreement with their politics,” said historian Gregg Herken, the author of “Cardinal Choices,” a history of presidential science advising. “Reagan appointed [George] Keyworth, and Keyworth supported SDI [the controversial Strategic Defense Initiative, more popularly known as the “Star Wars” program]. And Keyworth was pretty much a protege of Edward Teller, who was one of the advocates of SDI.”

There could be many reasons the appointment is taking so long, said Zuoyue Wang, a historian of science at California State Polytechnic University in Pomona.

“I believe that several factors are at work,” he said in an email. “The deep divide between the American scientific community and the Trump campaign/administration over key issues, including climate change and nuclear arms control; President Trump’s transactional style of leadership and policy-making, which tends to devalue long-term planning which is an important function of science advising; and probably the unwillingness of many prominent American scientific and technological leaders to serve under the current administration.”

And at least one science policy figure thinks it may be better that Trump has waited — at least instead of picking someone underqualified.

“Just selecting someone for the sake of doing so, who does not have the respect of the [science and technology] community nor the independence that is crucial for someone in that role, may do more harm than good,” noted Deborah Stine, a professor of public policy at Carnegie Mellon University who worked on science policy for the Congressional Research Service and in the Obama White House. “The longtime civil servants may instead do a better job in representing all of the community.”

The role of the president’s science adviser was first elevated to major prominence by President Dwight D. Eisenhower following the Soviet launch of Sputnik in 1957. It has gone through many permutations since.

Despite initially naming an adviser very early after his first election, Nixon later moved the role out of the White House as he dismantled the White House Office of Science and Technology in 1973, outsourcing its duties to the National Science Foundation and National Security Council.

The scientific community loudly decried the move. “It is the greatest change in the federal science establishment since President Eisenhower created the presidential science advisory office to help catch up with the Soviet Union in rockets and space and keep ahead in all science,” The Post wrote at the time.

After watching Nixon flout the need for in-house scientific expertise, Congress in 1976 moved to codify the science adviser role. Congress passed and Ford signed legislation to formally create the White House Office of Science and Technology Policy.

Ford appointed aeronautical engineer H. Guyford Stever as its director and his science adviser, and the Senate confirmed him to role.
The Post’s analysis of the timing of past presidential science adviser nominations was based on presidential records, Senate nomination records, and contemporary press reports in The Post, the New York Times and Science Magazine.

It focused on the timing of the initial nomination or naming of the adviser — not the timing of Senate confirmation, which can take considerably longer.

“These confirmation times have been increasing over the years, so even if Trump nominated someone today, it would be a long time before someone was in office,” Stine noted.

The analysis only went back to the time of Eisenhower, who named MIT administrator James Killian to be his special assistant for science and technology in a national television address.

While Eisenhower is considered to have created and elevated the role in a shape that resembles its modern form, identifying the first executive to have a science adviser is complicated, as presidents Franklin D. Roosevelt and Harry Truman each also had science advisory structures. Roosevelt created the highly influential wartime Office of Scientific Research and Development, headed by MIT president Vannevar Bush. However, there was not yet a consistent and recurring structure for White House science advising, and Truman’s Science Advisory Committee, which was run out of the now-defunct Office of Defense Mobilization, is regarded by historians as having relatively little influence by comparison.

As the Congressional Research Service notes, “opinions differ on who is the first presidential science advisor.”

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