



[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 600

Development of Nuclear Energy Technologies and Collaboration with States on Nuclear Development, Petitions for Rulemaking

AGENCY: Office of Nuclear Energy, Department of Energy.

ACTION: Petitions for rulemaking; request for comment.

SUMMARY: On November 18, 2018 and January 29, 2019, the Department of Energy (DOE) received similar petitions from Ms. Jill Adams and the State of Ohio, respectively, asking DOE to allow States and their agents to collaboratively develop new nuclear technologies with DOE, and under the authority of DOE, to include the development of small nuclear reactors. The petitions further request that DOE promulgate rules and establish programs that would allow States to develop collaborative nuclear and non-nuclear laboratories with DOE on currently licensed or formerly licensed nuclear facility grounds, and allow for the construction of collaborative nuclear experimentation containment facility testing platforms. Through this notice, DOE seeks comment on the petitions, as well as any data or information that could be used in DOE's determination on whether to proceed with the petitions.

DATES: Written comments and information are requested on or before **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: Interested persons are encouraged to submit comments, identified by "Nuclear Petitions," by any of the following methods:

Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

E-mail: [*NuclearPetitions@hq.doe.gov*] Include “Nuclear Petitions” in the subject line of the message.

Postal Mail: Mark Yale, Office of Nuclear Energy, U.S. Department of Energy, Mailstop 5A-148, 1000 Independence Avenue SW., Washington, DC 20585. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.

Hand Delivery/Courier: Mark Yale, Office of Nuclear Energy, U.S. Department of Energy, Mailstop 5A-148, 1000 Independence Avenue SW., Washington, DC 20585. Telephone: (202) 586-7856. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

Docket: For access to the docket to read background documents, or comments received, go to the Federal eRulemaking Portal at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Mark Yale, U.S. Department of Energy, Office of Nuclear Energy, Mailstop 5A-148, 1000 Independence Avenue, SW., Washington, DC 20585. Telephone: (202) 586-7856. E-mail: *Mark.Yale@hq.doe.gov*.

SUPPLEMENTARY INFORMATION: The Administrative Procedure Act (APA), 5 U.S.C. 551 *et seq.*, provides among other things, that “[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.” (5 U.S.C. 553(e)) DOE received similar petitions from Ms. Jill Adams and the State of Ohio, as described in this notice and set forth verbatim below, requesting that DOE issue regulations to (1) allow States and their agents to collaboratively develop new nuclear technologies with DOE, and under the authority of DOE, to include the development of small nuclear reactors, and (2) establish programs that would allow States to develop collaborative nuclear and non-nuclear laboratories with DOE on currently licensed or formerly licensed nuclear facility grounds, and allow for the construction of

collaborative nuclear experimentation containment facility testing platforms. The petitioners argue that DOE should take such actions pursuant to the authority granted by the Atomic Energy Act of 1954, Pub. L. 83-703, as amended. Petitioners cite various provisions found at 42 U.S.C. 2013 and 2021 in support of this position. In publishing these petitions for public comment, DOE is seeking views on whether it should grant the petitions and undertake a proposed rulemaking or other appropriate action. By seeking comment on whether to grant these petitions, DOE takes no position at this time regarding the merits of the suggested rulemaking or the assertions made by the Petitioner.

DOE welcomes comments and views of interested parties on any aspect of the petitions.

Submission of Comments

DOE invites all interested parties to submit in writing by **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]** comments and information regarding these petitions.

Submitting comments via <http://www.regulations.gov>. The <http://www.regulations.gov> webpage will require you to provide your name and contact information prior to submitting comments. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want

to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to <http://www.regulations.gov> information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through <http://www.regulations.gov> cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through <http://www.regulations.gov> before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that <http://www.regulations.gov> provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or postal mail. Comments and documents via email, hand delivery, or postal mail will also be posted to <http://www.regulations.gov>. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information in your cover letter each time you submit comments, data, documents, and other information to DOE. If you submit via postal mail or hand delivery, please

provide all items on a CD, if feasible, in which case it is not necessary to submit printed copies. No telefacsimiles (faxes) will be accepted.

Comments, data, and other information submitted electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English, and free of any defects or viruses.

Documents should not include any special characters or any form of encryption, and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: one copy of the document marked "Confidential" including all the information believed to be confidential, and one copy of the document marked "Non-confidential" with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) a description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made

available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time, and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

DOE considers public participation to be a very important part of its process for considering rulemaking petitions. DOE actively encourages the participation and interaction of the public during the comment period. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in determining how to proceed with a petition. Anyone who wishes to be added to DOE's mailing list to receive future notices and information about this petition should contact Office of Nuclear Energy program staff at (202) 586-7856 or via e-mail at *Mark.Yale@hq.doe.gov*.

Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of petitions for rulemaking.

Signed in Washington, D.C. on May 14, 2019

Edward McGinnis
Principal Deputy Assistant Secretary
Nuclear Energy

Attn: John T. Lucas General Counsel, GC-1

U.S. Department of Energy

1000 Independence Avenue, SW.

Washington, DC 20585.

Cc:

Eric J. Fygi, Deputy General Counsel, at eric.fygi@hq.doe.gov

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UNITED STATES DEPARTMENT OF ENERGY

In the Matter of Proposed Rulemaking Regarding the **Creation of New Rules**

PETITION FOR RULEMAKING

This Petition for Rulemaking is submitted pursuant to The Administrative Procedure Act, 5 U.S.C. 551, and 553, requires each federal agency to "give an interested person the right to petition for the issuance, amendment, or repeal of a rule" and defines a "person" to include an individual, partnership, corporation, association, or public or private organization other than an agency.

STATEMENT OF PETITIONER'S INTEREST

I, Jill Adams am a librarian who lives in Oregon. I am interested in anything we can do to reduce greenhouse gas emissions. Nuclear energy is a good way to achieve this but it needs policy to go with it. Terrapower and Nuscale energy companies in the Pacific Northwest could operate more easily and develop things faster if this petition is received favorably.

BACKGROUND

Federal agencies have failed to provide a domestic program of research and development for nuclear technologies to encourage maximum scientific and industrial progress allowing other nations to become the world leaders in nuclear and energy diplomacy. This failure has compromised America's safety and security and put states at a competitive disadvantage to foreign countries in producing new nuclear technologies. **Federal policies with states are not consistent with international arrangements and agreements of cooperation.**

Providing a regulatory pathway that removes much of the potential for litigation during the research and development phase of a technology allows private industry to better prove technologies and reduce investor risks. Such a pathway would allow America to bring many more nuclear technologies at an accelerated pace.

Countries around the world — particularly China, Russia, India, and developing nations — see the benefits of developing new nuclear technology and are poised to increase their nuclear production.

Unfortunately, projections by the Energy Information Agency show a diminishing U.S. nuclear presence as closures of reactors mount. To improve the human condition — ensuring clean air, clean water, and a robust economy — nuclear energy should be a part of America's diverse energy mix. The failure to innovate within the nuclear industry and produce newer more cost effective technologies and allow current nuclear power plants to produce income streams other than those from electricity generation; have prevented the nuclear industry from competing against other technologies such as natural gas.

Nuclear energy is simply more reliable than all other sources of energy except geothermal. It has the ability to operate at full capacity 90 percent of the time. By contrast, solar energy can only sustain maximum output less than one-third of the time and wind generation just about half of the time because the sun isn't always shining and the wind isn't always blowing. Another source of energy must always be ready to back up unreliable renewables, which is often coal and natural gas.

Nuclear power has even proved its reliability in the face of devastating conditions. A two-reactor nuclear power plant located near Houston, known as the South Texas Project, took a direct hit from the Category 4 Hurricane Harvey. While Texas' wind farms quickly cut off generation due to high winds, the nuclear power plant continued providing power at capacity for struggling communities during the disaster.

In other words, nuclear provided electricity when Texans needed it most.

While states have their own development programs for other energy technologies (coal, oil, gas, wind, and solar); the federal government has a near monopoly in the development of new nuclear technologies.

The federal government has failed to recognize substantively the interest of the states to develop new nuclear technologies for peaceful uses.

The federal government should remove barriers to the research and development of nuclear technologies so that states can provide scientific diversity and aid in accelerating the development of new nuclear technologies. This will help provide Americans with a program of maximum development and an energy future that is not only clean, affordable, and reliable, but also powers their lives and their potential for flourishing.

GROUNDS FOR PROPOSED ACTION

The United States has fallen behind or is falling behind the rest of the world in building nuclear reactors and developing new nuclear technologies. The United States has not come close to the rate of building and planning of nuclear power plants under the Atomic Energy Commission (AEC) which was formed in 1946 and dissolved in 1974. In 1974 the Energy Research and Development Administration (ERDA) and the Nuclear Regulatory Commission (NRC) legally split the duties of the AEC. The ERDA was to take on the research and development activities of the AEC and the NRC was to take on the safety and regulatory aspects of the defunct AEC. In 1977, Congress saw fit to dissolve the ERDA and consolidate the Federal Energy Administration, the ERDA, the Federal Power Commission, and programs of various other agencies into the Department of Energy (DOE).

What was lost in the dissolution of the AEC were a number of key issues that remain unresolved to this day. The 1954 Atomic Energy Act (AEA) amended the 1946 Atomic Energy Act and is still the core piece of legislation that drives the regulation of the nuclear industry. Included within the language of the 1954 Atomic Energy Act:

- Required the AEC to ***“recognize the interests of the States in the peaceful uses of atomic energy”*** U.S. Code 42 Section 2021.
- Required the AEC to ***“promote an orderly regulatory pattern between the Commission and State governments with respect to nuclear development”*** U.S. Code 42 Section 2021.
- Required the AEC to create ***“a program of conducting, assisting, and fostering research and development in order to encourage maximum scientific and industrial progress”*** U.S. Code 42 Section 2013.
- Required the AEC to ***“create a program of administration which will be consistent with the foregoing policies and programs, with international arrangements, and with agreements for cooperation”*** U.S. Code 42 Section 2013.

Many of these legal requirements, as laid out by Congress in 1954 are not being met since the AEC was dissolved.

STATEMENT IN SUPPORT OF PROPOSED ACTION

While the NRC has developed rules that allow states to regulate source material and byproducts, it has failed to recognize the interests of states to develop new nuclear technologies and to encourage maximum scientific and industrial progress. The NRC however, has correctly identified that its mission is only concerned with safety and regulation; not development. Providing a program that encourages maximum scientific and industrial progress most correctly falls under the umbrella of the DOE. We believe a proper interpretation of the law is that the authority of the DOE can be extended to states in collaborative research and development agreements per the 1954 AEA mandate to recognize the states interest in developing nuclear technologies for peaceful uses and the provision for providing a program of maximum development. We do not believe DOE authority can extend to commercial activity unless the NRC has previously authorized such activity such as in the production of medical isotopes from research reactors - or- the DOE developed reactor is a demonstration reactor that aids in determining real world feasibility.

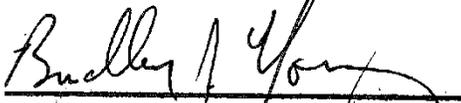
PROPOSED ACTION

I, Jill Adams hereby petitions the United States Department of Energy, under its authority, to promulgate rules and establish programs that will allow states and their agents to collaboratively develop new nuclear technologies with the United States Department of Energy, and under the authority of the United States Department of Energy, including, but not limited to, the development of small nuclear reactors that are designed to produce ten megawatts or less of thermal energy, thus providing for a program of maximum development that recognizes the interests of states.

I, Jill Adams hereby petitions the USDOE to promulgate rules and programs that will allow states to develop collaborative nuclear and non-nuclear laboratories with the United States Department of Energy on currently licensed or formerly licensed nuclear facility grounds, within their respective states, and allow for the construction of collaborative nuclear experimentation containment facility testing platforms.

CERTIFICATION

The following is a true and correct copy.


Clerk, Ohio House of Representatives

(132nd General
Assembly)
(House
Resolution
Number 518)

A RESOLUTION

To petition the United States Department of Energy to promulgate rules and establish programs allowing states, in collaboration with the Department, to develop new nuclear technologies and laboratories and construct nuclear experimentation containment facility testing platforms.

Be it resolved by the House of Representatives of the State of Ohio:

WHEREAS, The United States Department of Energy (USDOE) has nuclear energy development agreements with foreign nations such as China; and

WHEREAS, The State of Ohio has the sovereign right to protect its citizens, protect its environment, and improve its economy, if doing so does not negatively affect any other state within the United States; and

WHEREAS, The federal government has failed to provide for a national long-term repository for our nation's high-level nuclear waste; and

WHEREAS, Ohio's nuclear reactors produce high-level nuclear waste, and this waste is currently stored on-site in temporary facilities; and

WHEREAS, The federal government has failed to provide a stable, secure, and economically viable supply of medical isotopes; and

WHEREAS, Ohio's hospitals use lifesaving medical isotopes in diagnostic imaging and in the treatment of diseases such as cancer; and

WHEREAS, There are known technologies, and new fields of study that are developing technologies, that can consume high-level nuclear waste and produce medical isotopes; and

WHEREAS, 42 U.S.C. 2013 directs authorized federal agencies to:

(A) Encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security of the nation and with the health and safety of the public in mind; and

(B) Administer domestic activities and programs consistent with the policies and programs for nuclear activities, with international arrangements, and with agreements for cooperation; and

WHEREAS, 42 U.S.C. 2021 provides:

(A) That the federal government and its authorized agencies must do the following:

(1) Recognize the interests of the states in the peaceful uses of atomic energy; and

(2) Promote an orderly regulatory pattern with respect to nuclear development, without federally exclusive powers to develop nuclear technologies, and within federally defined regulatory powers overseeing the handling and storage of nuclear materials; and

(B) That, as the states improve their capabilities to regulate effectively such nuclear materials, additional legislation may be desirable; and

WHEREAS, 42 U.S.C. 2021 provides for the establishment of procedures and criteria for discontinuance of certain federal regulatory responsibilities with respect to byproduct, source, and

special nuclear materials, and the assumption of those responsibilities by the states; and

WHEREAS, 42 U.S.C. 5801 transferred the authority for the development of nuclear technology from the Atomic Energy Commission to the Energy Research and Development Administration, and 42 U.S.C. 7151 transferred the authority from the Energy Research and Development Administration to the USDOE, and 42 U.S.C. 5841 transferred the licensing and regulation of nuclear reactors from the Atomic Energy Commission to the United States Nuclear Regulatory Commission (USNRC); and WHEREAS, The Administrative Procedure Act, 5 U.S.C. 551, and 553, requires each federal agency to "give an interested person the right to petition for the issuance, amendment, or repeal of a rule" and defines a "person" to include an individual, partnership, corporation, association, or public or private organization other than an agency; and

WHEREAS, The House of Representatives of the State of Ohio is a public organization other than an agency of the federal government and is recognized as a person by the Administrative Procedure Act, 5 U.S.C. 551, and therefore has the legal right to petition federal agencies regarding the issuance of rules; and

WHEREAS, Directives from Congress to the USNRC to provide safety, and to the USDOE to provide for a program of maximum development of nuclear technologies, are in opposition to each other, if taken to an extreme; and

WHEREAS, The widespread domestic participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with international arrangements and international agreements of cooperation is largely dependent upon the cost of regulation; and

WHEREAS, Regulations promulgated by the USNRC have become so prohibitively expensive that they prevent the maximum development of nuclear technologies; and

WHEREAS, The intent of the laws passed by the United States Congress is clear that as states gain greater expertise with nuclear materials, they should be allowed greater research and development autonomy consistent with international arrangements and that of international agreements of cooperation; and

WHEREAS, The House of Representatives of the State of Ohio recognizes that the decentralization of nuclear research and development from the federal government to the states will help to accelerate innovation in the development of nuclear technologies and allow the United States to once again lead the world in the development of nuclear technologies; and

WHEREAS, It is not the purpose or mission of the USNRC to:

(A) Provide and encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security of the nation;

(B) Provide a program administering domestic activities and programs consistent with policies and programs of nuclear activities, with international arrangements, and with international agreements for cooperation; and

(C) Recognize the interests of the states in the development of peaceful uses of atomic energy; and

WHEREAS, The State of Ohio has the sovereign right to research and develop new nuclear technologies for peaceful purposes, to improve the Ohio economy, to ensure a stable

supply of isotopes for Ohio citizens, to reduce and consume high-level nuclear waste, and to generate energy for Ohioans; and

WHEREAS, The State of Ohio has an interest in developing new nuclear technologies to produce medical isotopes, industrial isotopes, isotopes for space exploration, and isotopes for the peaceful defense of our nation; technologies to consume nuclear waste produced in Ohio; and safer and more cost-effective nuclear technologies that produce zero carbon energy and less high-level nuclear waste than traditional light water reactors; now therefore be it

RESOLVED, That we, the members of the House of Representatives of the 132nd General Assembly of the State of Ohio, hereby petition the USDOE, under its authority, to promulgate rules and establish programs that will allow states and their agents to collaboratively develop new nuclear technologies with the USDOE, including, but not limited to, the development of small nuclear reactors that are designed to produce ten megawatts or less of thermal energy, thus providing for a program of maximum development that recognizes the interests of states; and be it further

RESOLVED, That we, the members of the House of Representatives of the 132nd General Assembly of the State of Ohio, hereby petition the USDOE to promulgate rules and programs that will allow states to develop collaborative nuclear and non-nuclear laboratories with the USDOE on currently licensed or formerly licensed nuclear facility grounds, within their respective states, and allow for the construction of collaborative nuclear experimentation containment facility testing platforms; and be it further

RESOLVED, That the Clerk of the House of Representatives transmit duly authenticated copies, formatted according to USDOE rules for rulemaking petitions, by registered postal mail or by any other means that confirms delivery, receipt, and acceptance of this petition to the USDOE Office of the General Counsel, GC-1, Attention: John T. Lucas, United States Department of Energy, 1000 Independence Avenue, S.W., Washington D.C. 20585; and be it further

RESOLVED, That the Clerk of the House of Representatives transmit electronic copies to: Eric J. Fygi, Deputy General Counsel, at eric.fygi@hq.doe.gov; Mary Therese Keokuk, Executive Assistant to the Deputy General Counsel, at therese.keokuk@hq.doe.gov; Daniel Cohen, Assistant General Counsel for Legislation, Regulation, and Energy Efficiency, at daniel.cohen@hq.doe.gov; and Elizabeth Kohl, Deputy Assistant General Counsel for Legislation and Regulation, at elizabeth.kohl@hq.doe.gov.

A handwritten signature in black ink that reads "Ryan Smith". The signature is written in a cursive style and is positioned above a horizontal line.

Speaker ___ of the House of Representatives.