



October 25, 2021

Via Electronic Submission to paareportnoi@hq.doe.gov

Mr. Stewart Forbes
Office of the Assistant General Counsel for Civilian Nuclear Programs
U.S. Department of Energy, Room 6A-167
1000 Independence Ave., SW
Washington, DC 20585

Subject: DOE's Notice of Inquiry on Preparation of Report to Congress on the Price-Anderson Act (86 Fed. Reg. 40,032)

Dear Mr. Forbes:

In response to the Department of Energy's ("DOE") Notice of Inquiry ("NOI") regarding preparation of the Department's report to Congress on the need for continuation or modification of the Price-Anderson Act ("Price-Anderson" or "PAA"),¹ Urenco USA Inc. appreciates the opportunity to submit these comments. Urenco USA Inc. is the corporate parent of Louisiana Energy Services, LLC ("LES"), which is the licensee and operator of the Urenco USA ("UUSA") facility, a uranium enrichment facility in New Mexico, also known as the National Enrichment Facility.

General Comments from Urenco USA Inc.:

Comment 1: Renewal of the PAA is essential to development of new reactors, including SMRs and advanced reactors, as well as for the development of new fuel supplies using HALEU.

The development of new reactors, such as small modular reactors ("SMRs") and advanced reactors, is at the center of our Nation's efforts to advance innovative nuclear technologies and achieve clean energy goals. SMRs and advanced reactors are designed to integrate into energy markets by complementing the operation of renewables and replacing the loss of coal and other fossil generation. A continuation of the PAA system is essential to promote the commercial investment that will be needed to commercialize these advanced technologies. Without an adequate nuclear liability regime in place, the potential risk of nuclear liability will make it unlikely that small modular and advanced reactors will be developed on a commercial scale. Even for the existing nuclear fleet, which will continue to have PAA coverage under the current law, a failure to renew the PAA could create long-term uncertainty that leads to further premature retirement of units. In short, reactor designers and nuclear suppliers like Urenco USA Inc. depend on having adequate nuclear liability coverage for both the existing fleet of operating reactors and any new reactors to protect against potentially unlimited liability.

¹ "Notice of Inquiry on Preparation of Report to Congress on the Price-Anderson Act," 86 Fed. Reg. 40,032 (July 26, 2021).

Suppliers to the nuclear power industry depend on the nuclear liability coverage provided under the PAA that maintains certainty and predictability as to liability for nuclear damage, including (1) the channeling of liability for nuclear damage exclusively to the reactor operator; (2) the robust system of nuclear liability insurance for reactor operators that is available; and (3) the comprehensive process for prompt compensation of injured persons in the event of a nuclear incident.

Maintaining PAA coverage is thus essential to the development of advanced nuclear technology in the United States. Congress should also recognize that the operation of many advanced reactor designs is based on High-Assay Low-Enriched Uranium (“HALEU”) fuel. HALEU fuel facilities are expected to be as safe as existing fuel facilities, but are unlikely to be developed without adequate nuclear liability insurance coverage. For fuel fabrication facilities, the NRC has discretionary authority under the PAA to determine whether to require nuclear liability insurance coverage. With respect to commercial uranium enrichment facilities, UUSA would qualify pursuant to Section 193(d)(1) of the AEA for private nuclear liability insurance coverage as required by NRC for any new enrichment facility for producing HALEU.

Accordingly, in its report to Congress, DOE should highlight the importance of HALEU fuel supplies for advanced reactor commercialization and recommend that Congress monitor the private nuclear insurance market to ensure that adequate nuclear liability insurance coverage will be available for HALEU fuel cycle facilities.

Comment 2: Price-Anderson continues to be needed to provide a comprehensive system for compensation of the public.

DOE should also highlight that the PAA is needed to provide a comprehensive and exclusive system for compensation of the public. Urenco USA Inc. notes that the decision of the U.S. Court of Appeals for the Tenth Circuit in *Cook v. Rockwell*, 790 F.3d 1088 (10th Cir. 2015), has created potential uncertainty for operators of nuclear facilities. That decision permitted local landowners to bring state law nuisance claims for damages based on alleged plutonium contamination on their private land adjacent to Rocky Flats, a former DOE nuclear site. In that case, the plutonium contamination did not arise from a release in excess of federal limits and did not actually damage the land, but allegedly harmed the use and enjoyment of the plaintiffs’ land. While the *Cook* decision involved very unique site-specific facts and procedural complexities, it could be interpreted as allowing parties to circumvent the PAA system for compensating the offsite public for property damage from a nuclear incident.

The *Cook* decision appears inconsistent with decisions of other Circuits that have recognized the comprehensive nature of the compensation system of the PAA, such as the Third Circuit’s 1991 precedent in the *TMI Litigation Cases*.² The *Cook* decision, however, has been left unchallenged since the parties reached a settlement of the claims while a petition for certiorari was pending at the U.S. Supreme Court.

In its report, DOE should highlight the importance to nuclear owners and operators of a comprehensive and predictable nuclear liability regime, and note that Price-Anderson continues to be needed to provide a

² See *In re TMI Litigation Cases Consolidated II*, 940 F.2d 832 (3d Cir. 1991), cert. denied, 503 U.S. 906 (1992), and decisions following it.

comprehensive and exclusive system for compensation of the public for a nuclear incident, especially in view of the Tenth Circuit's *Cook* decision.

Responses to Select Questions in DOE's NOI:

Question 1: Should the DOE Price-Anderson indemnification be continued without modification?

Urenco USA Inc. supports continuation of DOE's PAA indemnification. Indemnification of contractors pursuant to Section 170(d) of the AEA has been a necessary tool to support U.S. government national security objectives while also providing the public with an effective method for compensation in the event of public liability claims. This indemnification also provides certainty for DOE contractors performing services on DOE projects that involve a risk of nuclear liability. Urenco USA Inc. believes continuation of the current indemnification of contractors under the PAA is essential to DOE's ability to obtain goods and services for DOE's nuclear energy programs.

Further, to support the availability of fuel supplies for commercial use in SMRs and advanced reactors, including development of a domestic HALEU production capability with DOE support, private entities that participate in such efforts may rely on PAA indemnification to provide certainty and predictability in the event of a nuclear incident. This level of certainty and predictability also provides assurance to investors in the new technologies, who need confidence that their financial investment in advanced nuclear technologies will not be adversely affected by novel legal claims and related litigation. As noted above, PAA protection is essential to encourage investment in and commercial development of the advanced reactor industry and HALEU-related fuel supplies.

Question 14: Should the PAA be modified to extend its authorization beyond 2025, or to make permanent the authorization? If so, what would be the effect, if any, on the DOE Price-Anderson indemnification? What would be the effect, if any, on the United States' adherence to the CSC?

The PAA's authorization should be made permanent to provide regulatory certainty for industry and the public. The PAA regime aligns with the principles of the global framework for managing nuclear liability, including the Convention on Supplementary Compensation for Nuclear Damage (the CSC), and Urenco USA Inc. does not expect that this framework will change if the PAA is made permanent.

If being made permanent is not feasible, Urenco USA Inc. supports extending the authorization of the PAA beyond 2025, at a minimum, for at least 20 years, consistent with the prior extension. This would provide base level certainty for today's developers of new and advanced reactors and HALEU fuel because such developers have a planning horizon beyond 20 years for purposes of commercialization of advanced reactors and related fuel. Thus, an extension well beyond 20 years, or a permanent extension, is warranted to encourage development of new reactors, including SMRs and advanced reactors, and the necessary new fuels, such as HALEU.

Question 21: *Should the PAA be modified to address any unique circumstances or issues raised by the development and deployment of advanced nuclear reactors, including small modular reactors and microreactors? If so, describe the modification and explain the rationale.*

Urenco USA Inc. believes that the PAA system should continue to apply to new power reactor designs, including SMRs, advanced reactors, and microreactors, in the same manner as it applies to existing commercial power reactors today. There are no unique circumstances presented by advanced and small modular reactors from a nuclear liability perspective. For instance, SMR and advanced reactor designs are expected to present less risk than the current generation of reactors in terms of the potential for off-site releases or other nuclear damage. In addition, Congress has already provided special treatment for potential licensees of modular reactors by defining what combination of reactors is entitled to be considered a single reactor under the PAA for determining the applicable financial protection requirements.

Developers of advanced reactors and suppliers, including enrichers and fuel fabricators, still require the same protections against liability for nuclear damage that is provided today under the PAA. Any lapse in nuclear liability coverage would create tremendous uncertainty for developers of and investors in SMRs and advanced reactors, jeopardizing the commercialization of these promising technologies.

Many advanced reactor designs are expected to use HALEU fuel, and the production of HALEU fuel is likewise not expected to present any significant increased risks compared with current LEU fuel. Existing reactors operating on LEU usually contain up to 5% uranium-235, whereas HALEU fuel is enriched to between 5% and no more than 20% uranium-235 – the same isotope of uranium as used in current fuel with moderately increased enrichment levels. Thus use of HALEU fuel should not introduce any new or different types of accidents or a substantial increase in consequences.

Private nuclear liability insurance is expected to be available for HALEU production facilities. Nevertheless, as noted above, DOE and Congress should monitor the development of the private insurance market and, as necessary, study the potential benefits of extending certain PAA protections to HALEU fuel production facilities.

Urenco USA Inc. would be pleased to provide DOE with any additional information that may be useful.

Please do not hesitate to contact me at (703) 682-5211 (office) or (571) 243-3778 (cell), or by email at mary.neumayr@urencocom.

Sincerely,

Mary Neumayr

Mary Neumayr
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Urenco USA Inc.