



U.S. DEPARTMENT OF
ENERGY

Section 934 Report

Report to Congress
February 2018

United States Department of Energy
Washington, DC 20585

Message from the Secretary

The Department is providing this report in response to the Energy Independence and Security Act of 2007 (Pub. L. 110-140), subsection 934(e)(2)(C)(iv), concerning the need for continuation or amendment of section 934. Section 934 addresses how the United States will meet its obligations under the Convention on Supplementary Compensation for Nuclear Damage (CSC), which provides the basis for a global nuclear liability regime critical to international cooperation in nuclear projects.

This report contains an update on the Department's activities to implement the requirements of section 934, and an assessment of the need for continuation or amendment of that section, taking into account the potential effects of implementation of the CSC on the United States nuclear industry and suppliers.

Pursuant to the statutory requirement, this report is being provided to the following Members of Congress:

- **The Honorable John Barrasso**
Chairman, Senate Committee on Environment and Public Works
- **The Honorable Thomas R. Carper**
Ranking Member, Senate Committee on Environment and Public Works
- **The Honorable Greg Walden**
Chairman, House Committee on Energy and Commerce
- **The Honorable Frank Pallone, Jr.**
Ranking Member, House Committee on Energy and Commerce

If you have any questions or need additional information, please contact me or Ms. Jennifer Loraine, Deputy Assistant Secretary for Senate Affairs, or Mr. Marty Dannenfelser, Deputy Assistant Secretary for House Affairs, Office of Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely

A handwritten signature in black ink that reads "RICK PERRY". The letters are in all caps and have a cursive, slightly slanted appearance.

Rick Perry

Executive Summary

The Department has made substantial progress on the process to develop regulations under Section 934 to establish a retrospective risk pooling program by which United States nuclear suppliers will reimburse the United States government for any contribution it makes to the international supplementary fund under the Convention on Supplementary Compensation for Nuclear Damage in the event of a nuclear incident outside the United States not covered by the Price-Anderson Act.

Since issuance of the first 5-year report under section 934 in January 2013, the Department issued a Notice of Proposed Rulemaking (NOPR) and a proposed information collection to facilitate development of a regulation to establish a retrospective risk pooling program applicable to United States nuclear suppliers. In connection with the NOPR and the information collection process the Department held multiple public meetings and received numerous comments from the nuclear industry on the proposed regulation and requested supporting data and information. The Department has worked collaboratively with the nuclear industry, has carefully considered their input and concerns, and will continue to engage with industry on the path forward for the rulemaking process. At present, the Department plans to gather additional information and data on nuclear suppliers, nuclear exports and risk allocation, and ultimately issue a Supplemental Notice of Proposed Rulemaking (SNOPR).

Some industry members have expressed the view that section 934 should be amended to lessen the burden on the U.S. nuclear industry. After giving careful consideration to these views, the Department is not recommending any amendment of section 934. The Department believes it can implement section 934 in an equitable manner, without undue burden on the nuclear industry, and intends to proceed with the ongoing rulemaking, taking into account public comments received to date and those forthcoming in response to the SNOPR to be issued in the future.



REPORT TO CONGRESS UNDER SECTION 934

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I. Legislative Language

The Department of Energy (DOE or the Department) is submitting its second 5-year report required under section 934(e)(2)(C)(iv) of the Energy Independence and Security Act of 2007 (Pub. L. 110-140), 42 U.S.C. § 17373, concerning the need for continuation or amendment of section 934. Section 934 allocates the costs associated with participation by the United States in the international nuclear liability compensation system established by the Convention on Supplementary Compensation for Nuclear Damage (CSC or the Convention) to the United States nuclear supplier industry, and directs the Department to promulgate regulations to carry out this purpose. Section 934(e)(2)(C)(iv) states in whole:

... "(iv) Report.- Not later than 5 years after the date of the enactment of this Act, and every 5 years thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives, a report on whether there is a need for continuation or amendment of this section, taking into account the effects of the implementation of the Convention on the United States nuclear industry and suppliers."

II. Introduction

The CSC was adopted on September 12, 1997 by a diplomatic conference convened by the International Atomic Energy Agency. The CSC is a global liability regime that provides consistent rules for handling legal liability resulting from a nuclear incident and ensuring prompt availability of meaningful compensation to parties for the nuclear damage resulting from such an incident. A global nuclear liability regime based on adherence to the CSC is a critical element of the infrastructure necessary for achieving the full benefits of nuclear power with respect to climate change, energy security, and economic growth.

The CSC is based on a two-tiered compensation system: 1) the first tier is provided under the national law of the country in which the nuclear incident occurred; and 2) if required, supplementary compensation (the "international supplementary fund") is provided by the other countries that are party to the CSC, up to an amount calculated in accordance with a prescribed formula in the CSC. The Convention entered into force on April 15, 2015, following ratification by Japan. Currently, there are 10 parties to the Convention -- Argentina, Canada, Ghana, India, Japan, Montenegro, Morocco, Romania, United Arab Emirates, and the United States. Eleven other countries have signed, but not ratified, the Convention.

Section 934 of the Energy Independence and Security Act of 2007, entitled "Convention on Supplementary Compensation for Nuclear Damage Contingent Cost Allocation," implements the CSC in the United States. Section 934 prescribes how the United States will meet its obligations under the CSC and, specifically, its obligation to contribute to an international supplementary fund in the event of certain nuclear incidents resulting in a call for funds.

Congress found that the CSC benefits United States nuclear suppliers, by replacing potentially open-ended liability for nuclear damage with a predictable liability regime for nuclear incidents not covered by the United States nuclear liability law, the Price-Anderson Act. Congress directed the Department to promulgate regulations to implement a retrospective risk pooling program whereby United States nuclear suppliers would be responsible to pay (reimburse) the United States for its contribution to the international supplementary fund. The retrospective risk pooling program calls for a premium to be assessed retrospectively to United States nuclear suppliers, with the premium amount based on a risk-informed formula that takes into account risk factors and exclusionary criteria identified in section 934.

III. Implementation of Section 934

CSC Notice of Proposed Rulemaking

DOE reported in its first 5-year report, submitted to Congress in January 2013, that a draft Notice of Proposed Rulemaking (NOPR) to establish the retrospective risk pooling program was undergoing interagency review at that time. The NOPR was finalized and published in the Federal Register, 79 Fed. Reg. 75076 (December 17, 2014), and is available on-line at the Department's webpage for the CSC rulemaking: <https://www.energy.gov/gc/convention-supplementary-compensation-rulemaking>.

The proposed regulation to establish a retrospective risk pooling program applicable to United States nuclear suppliers would be codified in a new part 951 in Title 10 of the Code of Federal Regulations. The new regulation would require United States nuclear suppliers to report on their nuclear export transactions and, if called upon following a nuclear incident at a covered nuclear installation in a CSC member country, make a risk premium payment to the retrospective risk pooling program. Funds contributed to the pool would be used to reimburse the United States government the amount it is obligated to contribute to the international supplementary fund. The proposed regulation in its pertinent subparts defines the purpose and scope of the regulation, the retrospective risk pooling program and the risk-informed assessment formula used to calculate an individual nuclear supplier's premium payment, the method and timing of payment to the United States government, and the reporting and information collection requirements for covered nuclear suppliers.

The central subpart of the proposed regulation is the risk-informed assessment formula used to allocate on a pro rata basis the cost among United States nuclear suppliers. DOE proposed two alternative approaches to the risk-informed assessment formula: Alternative 1, based on the relative risk associated with the nuclear supplier's goods or services exported; and Alternative 2, based on the relative risk associated with the nuclear sector to which a nuclear supplier's goods or services are exported. The "risk" in this context refers to the likelihood a nuclear supplier's goods or services would contribute to, and the nuclear supplier would be potentially liable for claims for damage resulting from, a nuclear incident at a covered nuclear installation

resulting in a call for funds under the CSC. Both approaches follow the risk factors and exclusionary criteria set forth in section 934.

The public comment period on the NOPR ran from issuance in mid-December, 2014 through mid-April, 2015. One public information session and one public workshop were held, with substantial participation and comprehensive comments provided by approximately 15 members or representatives of the broader United States nuclear industry.

On the whole, commenters appreciated the complexity of the regulatory process but expressed concern about and objection to many aspects of the proposed regulation. Nevertheless, several commenters provided specific recommendations on regulatory approaches that would be simpler to implement and result in an equitable cost allocation. The Department views the concerns and comments, summarized below, as constructive criticism that can be addressed through the standard rulemaking process without the need for amendment of section 934.

While commenters supported United States membership in the CSC and its underlying principles of a global nuclear liability regime as an important step in expanding opportunities for United States nuclear exports, they were critical of, in summary: the Department's estimates of how many and which United States nuclear suppliers would be covered by the rule; the technical bases for assessing and assigning risk to a particular nuclear good, service or sector; lack of predictability of the risk exposure and premium payment of an individual nuclear supplier; the need for a cap on any individual supplier's risk premium; overly broad and burdensome recordkeeping and reporting requirements; a look-back period prior to 2007 (the date of enactment of section 934); establishing an appropriate exception for nuclear suppliers with a relatively small volume of nuclear exports, along with exceptions for exports to low-risk nuclear installations or activities; and the Department's ability to formulate a fair and equitable cost allocation method consistent with the risk factors contained in section 934. In particular, some commenters objected to the use of value or related economic data on nuclear exports in a risk-informed formula, noting that such criteria are not among the risk factors identified in section 934. Overall, commenters viewed the regulation as too complex, insufficiently supported by information and data for the Department to proceed to a final rule, and recommended DOE issue a supplemental NOPR. In that regard, one commenter recommended and provided detailed elements of an alternative regulatory approach for DOE consideration.

CSC Information Collection Process

Following consideration of the comments received on the NOPR, and in support of further development of the rulemaking, the Department increased its efforts to gather data and information on nuclear exports and exporters from other relevant federal agencies. In combination with this effort, DOE published in the Federal Register, 81 Fed. Reg. 51193 (August 3, 2016), a proposed information collection process to obtain additional information directly from the nuclear industry. The proposed information collection - a form to be completed by United States nuclear suppliers - was intended to provide DOE with information

not reported or available from other agencies. The proposed form calls for reporting information designed in part to obtain information that would support a risk-informed regulation based on a model recommended by the Nuclear Energy Institute in its comment on the NOPR.

DOE held a public workshop on the proposed information collection in September 2016, and the comment period closed in November 2016. Several nuclear industry representatives attended the public workshop, and 3 entities submitted written comments on the information collection process. Additional information on this process is also accessible on the DOE webpage for the CSC rulemaking.

Commenters on the information collection process generally supported the DOE effort to collect additional information and data, although they raised various concerns and suggested revisions to the method or content of the information request. Industry comments reiterated some of the comments on the NOPR, and added concerns on: the Department's estimates of how many and which U.S. nuclear suppliers would potentially be required to complete the information collection form, the relevance of the information requested to an assessment of risk and establishment of a risk-informed formula, and the burden on industry to complete the form. Some commenters expressed the view that, in the end, it may prove too difficult or impossible for DOE to promulgate a regulation that is simple to implement, provides industry with clear contingent cost estimates, and is fair and equitable to all nuclear suppliers.

Path Forward on CSC Rulemaking Process

The Department has considered the comments received to date from the nuclear industry on the NOPR and the proposed information collection. These comments have proven valuable to DOE by, among other things, revealing areas of consensus and providing direction to DOE in the next phase of the rulemaking. Notably, many commenters suggested basing the risk-assessment formula on export activity only after the date of enactment of section 934, focusing the risk allocation on the nuclear sector exported to rather than risk associated with a particular nuclear good or service, accounting for revenues derived from nuclear exports in allocating costs among suppliers, fashioning a broad exception for small nuclear suppliers, mandating a cap on the amount any individual supplier would pay¹, and minimizing or deferring reporting and data collection processes until required. Many of the industry comments and suggestions provided thus far could be implemented with the rulemaking.

In recognition of industry's comments and concerns, and to mitigate any regulatory burden, the Department's plans are to place on hold the information collection. The Department, instead, will focus on efforts to obtain the data and information needed from other sources.

¹ We note that the industry consensus for a cap on the amount any individual supplier would be required to contribute would increase the contribution levels of other suppliers since section 934 provides that the entire amount of any United States contribution under the CSC would be paid by United States nuclear suppliers.

Specifically, the Department intends to gather additional information and data on nuclear suppliers, nuclear exports and risk allocation. The Department intends for this additional supporting research and analysis to be made available for public review and comment in conjunction with issuance of a SNOPR. This course of action, with multiple opportunities for continued industry input and DOE refinement of the proposed regulation presents a customary and measured path forward for implementation of section 934.

IV. Continuation or Amendment of Section 934

The Department received comments on the topic of whether or not section 934 should be amended through the public comment process for the NOPR, the information collection, and a separate DOE Request for Information on Reducing Regulation and Controlling Regulatory Costs, 82 Fed. Reg. 24582 (May 30, 2017). Through these processes, some nuclear industry commenters noted several areas of concern that might warrant amendment of section 934. Their primary concerns can be summarized as follows: reconsideration of the principle that United States nuclear suppliers should be responsible to pay the United States contribution, noting that the contingent cost is a disincentive to expanded United States nuclear exports and that other CSC member countries do not follow this approach; simplifying the regulatory requirement as experience to date has shown DOE's inability to implement a fair, risk-informed rulemaking under current law; enacting an exception for a supplier paying a contribution in the case of a nuclear incident arising in a CSC member country with national laws non-compliant with the CSC, or with covered nuclear installations that represent an unusually high risk of a nuclear incident; and instituting by statute a reasonable and appropriate cap on the retrospective premium payment for any individual nuclear supplier to provide greater certainty and insurability on risk exposure.

As discussed previously, the Department does not believe amendment of section 934 is necessary in order for the Department to implement section 934. The Department remains committed to enacting regulations that are fair and equitable, and that mitigate any potentially adverse impact on the United States nuclear supplier industry.

V. Conclusion

The Department is not recommending any amendment of section 934. The Department will proceed with completing the ongoing rulemaking to implement section 934 in an equitable manner, without undue burden on the nuclear industry. The Department intends to continue the dialogue with the nuclear industry and to take its views into account in shaping the final regulations.