Convention on Supplementary Compensation Rulemaking

Cost Allocation Regulations Pursuant to Section 934 of the Energy Independence and Security Act of 2007

Department of Energy Office of General Counsel January 2015

Introduction to the Notice of Proposed Rulemaking at 10 CFR Part 951

- On December 17, 2014, the U.S. Department of Energy (DOE) issued proposed regulations to implement section 934 of the Energy Independence and Security Act of 2007 (EISA) (79 FR 75076)
- Section 934 of the EISA implements in the U.S. the Convention on Supplementary Compensation (CSC), an international convention establishing a global nuclear liability regime
- As a party to the CSC, the U.S. is obligated to contribute, if called upon, to the international supplementary fund created under the CSC to ensure adequate financial compensation is available to victims of certain nuclear incidents
- Section 934 establishes a retrospective risk pooling program to allocate the cost of any U.S. contribution to the international supplementary fund to U.S. nuclear suppliers that benefit from the CSC

Background on the Convention on Supplementary Compensation for Nuclear Damage

- The CSC establishes a global nuclear liability regime that will benefit:
 - Victims of nuclear incidents by providing prompt and meaningful compensation under a two-tier system:
 - First tier: provided by the law of the State where the nuclear incident occurs, and would equal a minimum of \$450 million
 - Second tier: provided by an "international supplementary fund" created under the CSC, and funded by contributions from CSC member States
 - Nuclear suppliers by providing consistent rules for dealing with legal liability, replacing potentially open-ended liability with predictability, and, in effect, providing "insurance" for potential nuclear liability
- CSC member States contribute to the international supplementary fund only if there is a nuclear incident for which the first tier of compensation under a State's national law is insufficient

Background on Convention on Supplementary Compensation for Nuclear Damage, Continued

- The CSC has been signed by 18 countries and ratified by 5 countries --Argentina, Morocco, Romania, United Arab Emirates and the United States
- The CSC will come into force and effect when 5 countries having the required threshold nuclear capacity ratify it
- The Japanese Diet has given its approval to ratification by Japan
- The CSC will come into force and effect 90 days after Japan deposits its instrument of ratification with the IAEA, expected in early 2015
- Canada also is expected to join the CSC in the first half of 2015

Background on Section 934 of the Energy Independence and Security Act of 2007 (EISA)

- Mandates that U.S. nuclear suppliers, not U.S. taxpayers, fund any U.S. contribution to the international supplementary fund
- Establishes that the amount owed or "premium payment" of a nuclear supplier is retrospective, meaning it is paid only if a nuclear incident occurs and the U.S. is called upon to contribute to the international supplementary fund
- Mandates that the premium payment be risk-based and pro-rated, meaning it is determined based on the risk associated with the goods or services supplied by a nuclear supplier and apportioned equitably among all U.S. nuclear suppliers
- Directs DOE to promulgate regulations to establish a retrospective risk pooling program and a risk-informed assessment formula to calculate and collect the premium payments from U.S. nuclear suppliers

Development of the CSC Notice of Proposed Rulemaking

- DOE issued a Notice of Inquiry in 2010, seeking comment from the public to assist in developing regulations to implement the mandate of section 934 of EISA (75 FR 43945)
- Nuclear industry representatives provided written comments and participated in individual meetings with DOE representatives
- Public comments were reviewed and considered in the formulation of the proposed rulemaking
- In late October, 2014, following interagency review and comment, DOE received clearance for release of the proposed rulemaking

CSC Notice of Proposed Rulemaking – Overview of the Regulation

- The CSC regulation, to be codified at 10 CFR Part 951, contains 4 subparts and related appendices:
 - Subpart A General Provisions
 - Subpart B Retrospective Risk Pooling Program
 - Subpart C Payments to the United States
 - Subpart D Information Collection
- Two Alternative Risk-Assessment Formulas proposed:
 - Alternative 1 Risk-Informed Assessment Formula by Nuclear Goods and Services
 - Alternative 2 Risk-Informed Assessment Formula by Nuclear Sector

Subpart A – General Provisions

- Purpose: establishes a retrospective risk pooling program and the risk-assessment formula to allocate the cost of any U.S. contribution under the CSC among U.S. nuclear suppliers (contingent cost)
- Scope: covers nuclear incidents that occur outside of the United States that result in a request for contributions to the international supplementary fund and are not covered by the Price-Anderson Act
- Definitions: provide meaning to certain words that are specific to the regulation and its operation, in addition to words that are defined in the Atomic Energy Act of 1954, as amended, or section 934 of the EISA

Subpart B – Retrospective Risk Pooling Program

- Two alternative risk-informed assessment formulas are proposed
- Both formulas are risk-informed and pro-rated:
 - The "risk" is the risk that a nuclear supplier's goods or services would provide the basis for a claim for damage resulting from a nuclear incident that could give rise to a call for contributions under the CSC
 - The amount or premium payment of any individual nuclear supplier is pro-rated: each nuclear supplier will be assessed a pro-rata share of the U.S. contingent cost based on its risk exposure relative to other nuclear suppliers
- Both alternatives exclude small nuclear suppliers and include a cap on the premium payment of any one nuclear supplier
- Main difference between alternatives is the method of expressing risk: one is based on the type of goods or services supplied, the other is based on the nuclear sector to which the goods or services are supplied

Subpart B – Retrospective Risk Pooling Program – Alternative 1

- Based on the type of goods or services supplied:
 - Appendix A lists primary nuclear items and services related to
 - 1) nuclear plant steam supply systems
 - 2) nuclear plant safety systems
 - 3) nuclear plant containment
 - Appendix B lists secondary nuclear items and services related to
 - 1) nuclear plants
 - 2) enrichment and fuel fabrication facilities
 - 3) irradiated nuclear fuel reprocessing facilities
 - 4) nuclear material transportation
 - 5) nuclear material storage facilities
- The items in Appendix A and B were drawn from several sources, including NRC regulations and guidance, e.g., 10 CFR part 110 and 10 CFR part 50, and international sources, e.g., IAEA Information Circulars related to controlled nuclear materials, equipment, facilities and technology

Subpart B – Retrospective Risk Pooling Program – Alternative 1, Continued

- The premium payment is based on a nuclear supplier's risk share of the contingent cost
- Risk share is a function of a nuclear supplier's risk exposure relative to the risk exposure of all nuclear suppliers
- Risk exposure is calculated based on the adjusted value of the covered transactions of a nuclear supplier, multiplied by 2 or 1 depending on the risk associated with the items
 - Items in Appendix A are given a weight of 2, meaning they have a greater likelihood of contributing to a nuclear incident resulting in a call for funds under the CSC
 - Items in Appendix B are given a weight of 1, meaning they have a lesser likelihood of contributing to a nuclear incident resulting in a call for funds under the CSC

Subpart B – Retrospective Risk Pooling Program – Alternative 2

- Based on the nuclear sector a nuclear supplier contributes to
- Four nuclear sectors are identified, and the type of nuclear supplier within each sector:
 - Facility Sector lead nuclear suppliers involved in the development and deployment of nuclear installations
 - Equipment and Technology Sector nuclear suppliers of equipment, components or technology used in a nuclear installation
 - Nuclear Material and Nuclear Material Transportation Sector nuclear suppliers of nuclear materials to a nuclear installation, or the transport of nuclear material
 - Service Sector nuclear suppliers of services to a nuclear installation for the design, construction, operation or decommissioning of a nuclear installation
- Each nuclear sector was allocated a risk amount
- Nuclear sectors and risk allocation:
 - Facility sector 50%
 - Equipment and Technology sector 25%
 - Nuclear materials and nuclear transportation sector 15%
 - Nuclear services sector 10%

Subpart B – Retrospective Risk Pooling Program – Alternative 2, Continued

- The premium payment is based on a nuclear supplier's risk share of the U.S. contingent cost allocated to the nuclear sector in which the supplier is grouped
- Risk share is a function of a nuclear supplier's risk exposure relative to the risk exposure of all nuclear suppliers within the sector
- Risk exposure is calculated for a nuclear supplier in each nuclear sector based on either the adjusted value or the quantity of the covered transactions of a nuclear supplier within the sector, multiplied by 2 or 1
- A multiple of 2 applies to transactions involving nuclear reactor facilities or facilities for the reprocessing of irradiated nuclear fuel
- A multiple of 1 applies to transactions involving nuclear material processing facilities, nuclear material storage facilities, or nuclear material transportation

Subpart C – Payments to the United States

- In the event the U.S. is called upon to make a contribution to the international supplementary fund, DOE would notify each nuclear supplier subject to the regulation to request payment of their retrospective premium, calculated in accordance with the riskinformed formula
- Payments would be due to the general fund of the U.S. Treasury
- Payments could be made in full, or in equal annual installments over a 5-year period
- Failure to pay would result in a penalty assessment, in addition to the premium payment itself, in an amount up to double the premium payment amount, with interest

Subpart D – Information Collection

- A nuclear supplier covered by the regulation would be required to provide to DOE information on its reportable transactions from prior years, and on an annual basis in the future
- Only applies to "reportable transactions" an export to a foreign nuclear installation by a covered nuclear supplier that occurred after a certain date(s), and involving only those nuclear goods or services, or nuclear sectors, as specified in Alternative 1 or 2, respectively
- The information to be collected would include:
 - Date and description of the transaction
 - Location of the nuclear installation
 - Volume or quantity of goods or services exported
 - Value of each item exported and total value for each export transaction
- Disclosure requirements information provided by a nuclear supplier would be protected in accordance with applicable law
- This information provides the necessary inputs for the formula to calculate a nuclear supplier's premium payment – the value or quantity of goods or services supplied by a nuclear supplier to a covered installation

Key Features of the CSC Rulemaking

- The premium payment would be owed by only those nuclear suppliers that meet all of the following criteria:
 - export goods or services that, if supplied in the U.S., would be subject to NRC regulations at 10 CFR Part 21, pertaining to defective and noncompliant goods or services
 - export the type of goods or services, or are within a nuclear sector, covered under Alternative 1 or 2, respectively
 - export goods or services to the type of nuclear installation covered by the CSC
 - obtained the export license or authorization for export of the goods or services
- The proposed regulation excludes small nuclear suppliers
- The proposed regulation includes a cap on the premium amount any one nuclear supplier would be required to pay

Key Definitions and Concepts

- Covered nuclear supplier
 - Nuclear supplier whose goods or services, if supplied in the U.S., would be subject to NRC's regulations at 10 CFR Part 21 on reporting of defective or noncompliant products
- Final nuclear supplier
 - The nuclear supplier that obtains, where required, an NRC general or specific license under 10 CFR 110, a Department of Commerce export license under 15 CFR 734, or DOE authorization under 10 CFR 810, for the export of the items involved in a reportable transaction.
- Lead nuclear supplier
 - A nuclear supplier whose adjusted value of reportable transactions for the period 1960 through 2007 exceeds \$500 million [or some other amount, e.g., \$1 billion]

Key Definitions and Concepts, Continued

- Nuclear Installation
 - 1) any nuclear reactor facility or plant (other than one used for sea or air transport)
 - 2) any facility or plant using nuclear fuel for the production of nuclear material, or any plant for the processing of nuclear material, including any facility for reprocessing irradiated nuclear fuel
 - 3) any facility or plant where nuclear material is stored (other than storage incidental to transport)
- Nuclear installations would include:
 - Civilian nuclear power reactors
 - Civilian nuclear research or test reactors
 - Nuclear fuel fabrication facilities
 - Spent or used nuclear fuel reprocessing facilities
 - Uranium enrichment facilities
 - Storage facilities for nuclear materials (includes storage of used nuclear fuel or radioactive wastes)
- Nuclear installations would not include:
 - Radioactive waste disposal facilities
 - Uranium mining or milling facilities
 - Uranium conversion facilities

Key Definitions, Continued

- Reportable Transaction
 - Under Alternative 1
 - Any transaction by a covered nuclear supplier after 1959 to provide any item listed in Appendix A, or after 2007 for items listed in Appendix B
 - Under Alternative 2
 - Any transaction by a covered nuclear supplier involving the supply of:
 - 1) a nuclear installation outside the U.S. between January 1, 1960 through 2007
 - 2) equipment, components or technology for a nuclear installation outside the U.S. after 2007;
 - 3) nuclear materials to a nuclear installation outside the U.S. after 2007;
 - 4) transportation outside the U.S. of nuclear material to or from a nuclear installation after 2007
 - 5) services to a nuclear installation outside the U.S. after 2007

Issues on Which DOE Seeks Comment

- Section III of the NOPR (79 FR 75090) solicits comments from the public on specific topics
- Topics for comment include:
 - Definition of covered nuclear supplier, lead nuclear supplier
 - Small nuclear supplier exclusion
 - Retrospective premium payment cap
 - Nuclear sectors
 - Risk share calculation
 - Reporting requirements

Conclusion

- Additional information and background to the proposed rulemaking can be found on the DOE website at: http://www.energy.gov/gc/convention-supplementarycompensation-rulemaking
- DOE will schedule a public workshop on the proposed rulemaking in the coming weeks, and prior to the close of the comment period scheduled for March 17, 2015
- Information and instructions on how to provide written comments can be found in the Federal Register Notice of Proposed Rulemaking, 79 FR 75076, Dec. 17, 2014