#### 6450-01-P

### DEPARTMENT OF ENERGY

### 10 CFR Part 951

[Docket number: DOE-HQ-2014-0021]

#### RIN 1990-AA39

Convention on Supplementary Compensation for Nuclear Damage Contingent Cost Allocation

AGENCY: Office of General Counsel, Department of Energy.

ACTION: Notice of proposed rulemaking.

SUMMARY: The U.S. Department of Energy (DOE or the Department) proposes to issue regulations under section 934 of the Energy Independence and Security Act of 2007. These regulations will establish a retrospective risk pooling program by which nuclear suppliers are expected to provide funds in the same amount as what the United States government would be obligated to contribute to an international supplementary fund under the Convention on Supplementary Compensation for Nuclear Damage in the event of certain nuclear incidents not covered by the Price-Anderson Act. The risk pooling program will involve a premium to be assessed retrospectively (i.e., a deferred payment made only if a nuclear incident occurs) based on a risk-informed assessment formula taking into account specified risk factors and exclusionary criteria to provide a fair and equitable proration of costs among U.S. nuclear suppliers benefited by the Convention on Supplementary Compensation for Nuclear Damage.

**DATES:** Meeting: DOE will hold an information session open to the public on January 7, 2015, from 10:00 AM to 12:00 noon in Washington, DC.

Comments: DOE will accept comments, data, and information regarding this notice of proposed rulemaking (NOPR) before and after the public meeting(s), but no later than [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: The information session will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue, SW., Washington, DC 20585-0121. To attend, please notify Ms. Brenda Edwards at (202) 586-2945 or by e-mail:

Brenda.Edwards@ee.doe.gov. See section IV, "Public Participation," for additional information and participant instructions. Additionally, DOE intends to conduct public workshop(s) on the proposed rulemaking. The date, time and place of such workshop(s) will be announced in subsequent Federal Register notice(s).

Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by RIN 1990-AA39, by either of the following methods:

- E-mail: Section934Rulemaking@Hq.Doe.gov.
- Mail: Ms. Sophia Angelini, U.S. Department of Energy, Office of the General Counsel,
   Mailstop GC-72, Section 934 Rulemaking, 1000 Independence Avenue, SW.,
   Washington, DC 20585. Please submit one signed original and three copies of all
   comments submitted by mail.

*Instructions*: All submissions received must include the agency name, docket number (DOE-HQ-2014-0021), and the RIN for this rulemaking. Note that all comments received will be posted without change, including personal information.

Docket: For access to the docket to read background documents or comments received, go to the Federal eRulemaking Portal at <a href="http://www.regulations.gov">http://www.regulations.gov</a>, or the website specifically established for this proceeding at <a href="http://www.energy.gov/gc/convention-supplementary-compensation-rulemaking">http://www.energy.gov/gc/convention-supplementary-compensation-rulemaking</a>.

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to Sophia Angelini (see contact information above) and by e-mail to <a href="mailto:OIRA\_Submission@omb.eop.gov">OIRA\_Submission@omb.eop.gov</a>.

## FOR FURTHER INFORMATION CONTACT:

Sophia Angelini, Attorney-Advisor, Office of the General Counsel for Civilian Nuclear Programs, GC-72, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585; telephone (202) 586-0319.

#### SUPPLEMENTARY INFORMATION:

- I. Authority and Background
- II. Summary of the Proposed Rule
  - A. Overview of the Proposed Rule
  - B. Section-By-Section Analysis and Discussion of Response to Comments Received on the Notice of Inquiry
- III. Issues on Which DOE Seeks Comment
- IV. Public Participation
- V. Regulatory Review Requirements

- A. Review Under Executive Order 12866
- B. Review Under the Regulatory Flexibility Act
- C. Review Under the Paperwork Reduction Act
- D. Review Under the National Environmental Policy Act
- E. Review Under Executive Order 13132
- F. Review Under Executive Order 12988
- G. Review Under the Unfunded Mandates Reform Act of 1995
- H. Review Under Executive Order 12630
- I. Review Under Executive Order 13211

# VI. Approval of the Office of the Secretary

#### I. Authority and Background

On December 19, 2007, the President signed into law the Energy Independence and Security Act of 2007 (the Act) (Pub. L. 110-140). Section 934 of the Act, "Convention on Supplementary Compensation Contingent Cost Allocation," addresses how the United States will meet its obligation under the Convention on Supplementary Compensation for Nuclear Damage (CSC or Convention), adopted in Vienna on September 12, 1997 at the International Atomic Energy Agency (IAEA) to pay into a supplementary compensation fund created by the Convention. The Convention provides the basis for a global nuclear liability regime where victims of nuclear incidents are provided prompt and meaningful compensation and suppliers in the nuclear energy industry are provided consistent rules for dealing with legal liability. The Convention provides an umbrella instrument that can accommodate both countries that belong to an existing nuclear liability treaty, such as the Paris Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960 (Paris Convention), or the Vienna Convention on Civil Liability for Nuclear Damage of 21 May 1963 (Vienna Convention), and countries that do not now belong to any nuclear liability treaty but accept the basic principles of nuclear liability law embodied in those treaties. At present, the Convention has been signed by 18 countries and ratified by 5 countries - Argentina, Morocco, Romania, United Arab Emirates, and the United States. With

the recent approval of ratification of the Convention by the Japanese Diet, it is expected that Japan will deposit its instrument of ratification with the IAEA in the near future, and that the Convention will come into force and effect 90 days thereafter.

A major feature of the Convention is the creation of an "international supplementary fund," which provides an additional (second) tier of compensation not otherwise available under a State's national law and to which each party to the Convention contributes. It is only this second tier of compensation that United States' nuclear suppliers would be required to fund.

The first tier of compensation is provided by the State where the nuclear incident occurred (the installation state), and is set in the Convention at a minimum of 300 million Special Drawing Rights (SDRs<sup>2</sup>). If that amount is insufficient, a second tier of compensation – the international supplementary fund - is available, funded by contributions from the CSC member States. The amount of the second tier compensation is determined by a formula prescribed in the Convention in Article IV. A CSC member State's contribution is the lower of the amount determined under Article IV.1(a) or Art. IV.1(c). The contribution amount under Article IV.1(a)is based on a CSC member State's: (1) nuclear generating capacity (thermal power shown at the date of the nuclear incident in a list of nuclear installations established under Article VIII); and (2) the United Nations (UN) assessment rate. The United States' UN assessment rate for 2014-2015 is 22%. In the alternative, Article IV.1(c) establishes a cap on the contribution amount owed by any one CSC member State (other than the installation state) per nuclear

<sup>&</sup>lt;sup>1</sup> For nuclear incidents occurring in the United States, the Price-Anderson Act would provide the coverage required under the Convention for the first tier of compensation, to which United States' nuclear suppliers are not required to contribute.

<sup>&</sup>lt;sup>2</sup> SDR is the unit of account defined by the International Monetary Fund (IMF) and used by the IMF for its own operations and transactions. In July, 2014, 1 SDR equaled about \$1.54; therefore, 300 million SDRs would equal roughly \$462 million dollars. Current information on the SDR conversion rates can be found at http://www.imf.org/external/np/exr/facts/sdr.htm.

incident. The cap phases out as the collective installed nuclear capacity of countries covered by the Convention increases.

The United States could owe as little as approximately \$70 million (plus a proportional amount of potential additional interest and costs awarded by a court as provide in Article III.4 of the Convention) when the Convention comes into force initially.<sup>3</sup> Assuming for example the 30 countries that have nuclear operating capacity in 2014 joined the CSC<sup>4</sup>, the United States would owe approximately \$150 million.<sup>5</sup>

Section 934 of the Act establishes a retrospective risk pooling program by which United States nuclear suppliers are expected to provide funds in the same amount as what the United

This amount is illustrative only and assumes the following: 6 Contracting Parties to the CSC (Argentina, Canada, Japan, Morocco, Romania and the United States); one SDR equals \$1.54; the United States UN assessment rate is 22%; the United States installed capacity is 307,000 MW thermal; and the aggregate installed capacity of all Contracting Parties is 450,000 MW thermal. Under Article IV.1(a) the contribution amount would be \$154,308,000, under Article IV.1(c) \$68,607,000; accordingly, the amount owed by the United States would be the lower amount, \$68,607,000.

The following provides additional information on how these amounts were calculated. The calculation under Article IV.1(a) is the sum of the amounts under 1(a)(i) and (ii): (i) \$141,834,000 [307,000 MW (U.S. installed capacity) x 300 SDRs (\$462 per SDR) = \$141,834,000] plus (ii) \$12,474,000 [ratio of the U.S. UN rate (22%) to the total UN rate of all Contracting Parties (36.62%) = 60%; amount under (i) for all Contracting Parties = 450,000 MW x 300 SDRs (\$462 per SDR) = \$207,900,000; 10% of that sum = \$20,790,000; 60% of \$20,790,000 = \$12,474,000], which equals \$154,308,000. The calculation under Article IV.1(c) is the product of (1) the U.S. UN rate of assessment plus 8 points, 30%, times (2) the total contributions of all Contracting Parties under subsection (b), \$228,690,000 [\$207,900,000 (450,000 MW x 300 SDRs (\$462 per SDR)) + \$20,790,000 (10% of 207,900,000) = \$228,690,000], which equals \$68,607,000.

<sup>&</sup>lt;sup>4</sup> Information on the 30 countries with operable nuclear power capacity in 2014 can be found at the World Nuclear Association website, http://www.world-nuclear.org/info/Facts-and-Figures/World-Nuclear-Power-Reactors-and-Uranium-Requirements/.

<sup>&</sup>lt;sup>5</sup> This amount is illustrative only and assumes the following: 30 Contracting Parties to the CSC; one SDR equal \$1.54; the United States UN assessment rate is 22%; the United States installed capacity is 307,000 MW thermal; and the aggregate installed capacity of all Contracting Parties is 1,000,000 MW thermal. Under Article IV.1(a), the contribution amount would be \$154,770,000; under Article IV.1(c) the amount would be \$182,952,000; accordingly, the amount owed by the United States would be the lower amount, \$154,770,000.

The following provides additional information on how these amounts were calculated. The calculation under Article IV.1(a) is the sum of the amounts under 1(a)(i) and (ii): (i) \$141,834,000 [307,000 MW (U.S. installed capacity) x 300 SDRs (\$462 per SDR) = \$141,834,000] plus (ii) \$12,474,000 [ratio of the U.S. UN rate (22%) to the total UN rate of all Contracting Parties (79.64%) = 28%; amount under (i) for all Contracting Parties = 1,000,000 MW x 300 SDRs (\$462 per SDR) = \$462,000,000; 10% of that sum = \$46,200,000; 28% of \$46,200,000 = \$12,936,000], which equals \$154,770,000. The calculation under Article IV.1(c) is the product of (1) the U.S. UN rate of assessment plus 14 points, 36%, times (2) the total contributions of all Contracting Parties under subsection (b), \$508,200,000 [\$462,000,000 (1,000,000 MW x 300 SDRs (\$462 per SDR)) + \$46,200,000 (10% of 462,000,000) = \$508,200,000], which equals \$182,952,000.

States government would be obligated to contribute as a CSC party, with respect to nuclear incidents not covered by the Price-Anderson Act, to the international supplementary fund created by the Convention. Section 934 authorizes the Department to promulgate regulations to implement the retrospective risk pooling program. Section 934 also specifies risk factors to be considered by DOE in developing the risk-informed assessment formula, including criteria for excluding certain goods and services or nuclear suppliers from the formula. Section 934(e)(2)(C).

On July 27, 2010, the Department published in the *Federal Register* a Notice of Inquiry (NOI) (75 FR 43945) and request for comment from the public on its development of regulations to implement section 934. In the NOI, the Department provided the public with a comprehensive background and explanation of the Convention, the scope, purpose and requirements of section 934, and the Department's deliberations on how to structure a draft regulation to effectuate the purposes and direction provided by Congress to the Department in section 934. The NOI may be referred to for additional background information on the Convention and section 934.

The comment period on the NOI was extended twice (75 FR 51986, August 24, 2010 and 75 FR 64717, October 20, 2010) in response to requests from the public. The extended comment period provided the public with opportunity to review and provide detailed comments in response to the NOI. The Department received comments from eleven organizations representing various elements of the nuclear industry. All such comments were posted and are available for review at <a href="http://www.energy.gov/gc/convention-supplementary-compensation-rulemaking">http://www.energy.gov/gc/convention-supplementary-compensation-rulemaking</a>. In addition, summaries of meetings with individual commenters who provided further input are available at <a href="http://www.energy.gov/gc/ex-parte-communications">http://www.energy.gov/gc/ex-parte-communications</a>. A summary

of the major comments received and the Department's responses are provided herein under the section-by-section analysis of this proposed rule.

# II. Summary of the Proposed Rule

# A. Overview of the Proposed Rule

This proposed rule establishes a new part 951 in Title 10 of the Code of Federal Regulations (CFR), which sets forth the requirements for U.S. nuclear suppliers to report on their nuclear export transactions and, if called upon, contribute a risk premium payment to the retrospective risk pooling program. The Department proposes two alternative formulas to calculate the risk premium payment of a nuclear supplier.

Subpart A sets forth the purpose and scope of the regulation, as well as proposed definitions. The purpose and scope of the regulation follows the direction in section 934 that DOE establish a risk-informed assessment formula to be used in determining the risk premium payment due by a nuclear supplier in the event of a nuclear incident outside the United States that results in a request for funds under the Convention and is not a Price-Anderson incident. The definitions section includes definitions drawn directly from section 934 of the Act, as well as additional terms necessary to operation of the regulation.

Subpart B sets forth provisions for establishment of the retrospective risk pooling program.

Two alternative regulatory approaches are proposed for calculating the risk-informed assessment formula: (1) a risk-informed assessment formula by nuclear goods and services; or (2) a risk-informed assessment formula by nuclear sector. Both alternatives establish a risk-informed assessment formula to determine a nuclear supplier's retrospective risk premium payment. In addition, both alternatives provide criteria for exclusion of small nuclear suppliers, and a cap on the amount any one nuclear supplier would owe under the program. The primary difference in

the alternatives rests with the method of expressing risk — where risk 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 installation resulting in a call for funds under the Convention — for purposes of calculating the retrospective risk premium. The first alternative expresses risk in terms of the specific goods or services provided by a nuclear supplier; the second alternative expresses risk in terms of the nuclear sector to which a nuclear supplier's goods or services are supplied. Regulatory text for both alternatives is set forth at the end of the proposal.

Subpart C sets forth the timing and method for payments to be made to the United States in the event of a call for funds under the Convention. Nuclear suppliers may pay the full amount upon notification by the Department of a required risk premium payment, or prorate the full amount over a five-year period, including applicable interest on the unpaid balance. In addition, Subpart C establishes the penalty amount if a supplier does not make the required payment.

Subpart D sets forth the information collection requirements associated with the administration of the retrospective risk pooling program. Those requirements include an initial report six months after the effective date of the rule, in which respondents describe each reportable transaction that occurred prior to the date of the rule, and an annual report thereafter. The information to be provided by a nuclear supplier includes: (1) description of the reportable transaction; (2) date of the transaction; (3) location of the nuclear installation(s) involved in the transaction; (4) volume or quantity of certain nuclear goods or services provided; and (5) value (in U.S. dollars) of the goods or services provided.

The appendices to the rule, applicable only under Alternative 1, set forth the list of specific primary and secondary nuclear items that form the basis for calculating the risk premium payment. The items are ranked as primary or secondary, and weighted as 2 or 1, respectively, in accordance with the likelihood the good or service would provide the basis for a claim for damage resulting from a nuclear incident giving rise to a call for funds under the Convention. Alternative 2 does not reference a list of goods and services; however, this alternative is based on a similar weighting system to differentiate risk among the goods and services provided by a nuclear supplier within each nuclear sector.

B. Section-By-Section Analysis and Discussion of Response to Comments Received on the Notice of Inquiry

# Subpart A – General Provisions

Section 951.1 and 951.2 - Purpose and Scope

The Department is proposing these regulations to implement a retrospective risk pooling program in accordance with section 934 of the Act. Section 934 calls for establishment of a retrospective risk pooling program in which United States nuclear suppliers are required to participate and cover their allocated share of the contingent costs resulting from a covered incident that is not a Price-Anderson incident. (A Price-Anderson incident is defined at subsection 934(b)(8) to mean a covered incident for which the Price-Anderson Act (section 170 of the Atomic Energy Act of 1954) would make funds available to compensate for public liability). The amount each nuclear supplier is required to contribute is determined by application of a risk-informed assessment formula developed by the Department. The program is retrospective, i.e., payment by a nuclear supplier is deferred and not due unless and until the United States is called upon to contribute to the international supplementary fund. The deferred payment is, in essence, the nuclear supplier's premium for insurance against the potential

liability for nuclear damage covered by the Convention. The regulations only cover the retrospective premium a nuclear supplier would be obligated to pay in the case of a nuclear incident outside the United States and not a Price-Anderson incident (a Price-Anderson incident may occur outside the United States if it arises from U.S.-owned nuclear material and involves activities conducted by or on behalf of DOE). The retrospective risk pooling program is not invoked where a nuclear incident occurs inside the United States.

All of the comments received by the Department on the NOI expressed support for the Convention and ratification of this international convention by the United States. The commenters supported the goal of adherence to a global nuclear liability regime to provide a predictable legal framework for international nuclear energy projects. This legal framework has the effect of providing United States nuclear suppliers with insurance for liability that arises out of any covered incident outside the United States that is not a Price-Anderson incident, and that without the Convention would be unlimited. While acknowledging the benefits of the Convention and the express mandate of section 934 that U.S. nuclear suppliers should pay the United States' contributions under the Convention, several commenters nonetheless expressed concerns about the policy of imposing this financial burden on nuclear suppliers and the ability of the Department to allocate the cost among suppliers in a defensible and equitable manner. Commenters noted that the financial burden imposed on the nuclear supplier industry might negatively impact the competitiveness of the United States nuclear industry in international markets, contrary to the President's goals in the National Export Initiative. In that regard, the comment was made that DOE should recommend to Congress that the Act be amended to eliminate the burden on industry and the rulemaking deferred to allow DOE to conduct in-depth discussions with industry to evaluate the impact on domestic jobs and gather data and

information to support a risk-based allocation system. Many commenters noted that current information and data was lacking on how to assess nuclear risks for the development of a risk-based formula, and/or to support the operation of such a formula in the event of an incident.

In response, the Department notes that section 934 requires the Department develop and implement regulations to establish the retrospective risk pooling program to be funded by U.S. nuclear suppliers. Moreover, recent events with the tsunami and earthquake affecting nuclear reactors in Fukushima, Japan underscore the importance of a robust legal system to promptly and meaningfully compensate victims of nuclear incidents and provide consistent rules for dealing with legal liability. The Department believes that sufficient information and data are available to develop a formula and that a data collection system can be implemented to support the operation of such a formula if it needs to be used in the future. Nonetheless, the Department seeks additional commentary and specific information from the nuclear industry on the potential impacts to U.S. competitiveness in the nuclear export arena and the President's National Export Initiative. The Department is also interested in receiving comment on which alternative regulation, the first or the second, is better suited to mitigate the impacts, if any, on United States' competitiveness in the nuclear export arena.

The Department has proposed two alternative methods of calculating the retrospective premium payment to provide the public with a set of options and a range of alternatives to review and assess. As explained in greater detail in the following sections, the proposed

<sup>&</sup>lt;sup>6</sup> In response to the accident at TEPCO's Fukushima Daiichi Nuclear Power Station, the IAEA issued its Action Plan on Nuclear Safety (Plan), approved by the Board of Governors and endorsed by the IAEA General Conference in September 2011, calling upon its members to strengthen nuclear safety through measures proposed in the Plan. <a href="http://ola.iaea.org/ola/documents/ActionPlan.pdf">http://ola.iaea.org/ola/documents/ActionPlan.pdf</a>. One of those measures is for members to support efforts to establish and promote a global nuclear liability regime, such as the CSC.

regulation addresses many of the commenters' concerns and adopts many of the safeguards suggested, while fulfilling DOE's obligation to implement section 934.

#### Section 951.3 – Definitions

The terms that are defined in the Act are so defined in this proposed regulation; however, DOE has added other terms as necessary to establish the retrospective risk pooling program and the risk-informed assessment formula. The following describes specific terms (not in alphabetical order) key to understanding the overall structure and operation of the retrospective risk pooling program under either Alternative 1 or 2; other terms are explained in connection with the subpart to which they specifically apply.

Nuclear supplier. This term is defined in the Act, and would be adopted verbatim in the regulation. The term nuclear supplier as defined in the Act means a covered person (or a successor in interest of a covered person) that — (A) supplies facilities, equipment, fuel, services, or technology pertaining to the design, construction, operation, or decommissioning of a covered installation; or (B) transports nuclear materials that could result in a covered incident. Section 934(b)(7). In light of the statutory definition which includes a successor in interest to a covered person, the term "nuclear supplier" would encompass an entity that merged with another having reportable transactions. Therefore, the merged company, as successor in interest, would also have reportable transactions. The Department sought comment in the NOI on whether further interpretation of this definition was necessary, noting its importance in the regulatory scheme but that it is "potentially very broad in scope, complex, and subject to interpretation." 75 FR 43946-43947, 43949. The Department received several comments echoing the importance of this term to the operation of the Act, the need for clarification of the term, and provisions excluding certain nuclear suppliers from operation of the Act. In this proposed rule, the Department

maintains the statutory definition of nuclear supplier, and addresses any uncertainty regarding inclusion or exclusion of a nuclear supplier from the retrospective risk pooling program through other provisions in the regulation, explained below.

Covered nuclear supplier and reportable transaction. To address the concerns of commenters regarding the definition of nuclear supplier and to add certainty to the rule, the proposed rule introduces the concept of a "covered nuclear supplier." A covered nuclear supplier is a nuclear supplier (as defined in the Act) whose goods or services, if supplied in the United States, would be required to comply with the requirements of 10 CFR part 21. Part 21 requires suppliers of basic components to any facility or activity licensed or otherwise regulated by the NRC to report any defects or noncompliance with their product. This NRC regulation acts as a safeguard to ensure that basic components of a nuclear facility are designed and manufactured to operate as intended, in a safe manner and without defect. If a good or service is subject to the part 21 requirements, it is more likely to be safety-related, or may be dedicated as safety-related by the NRC licensee if used in a safety-related function, and therefore provide the basis for a claim against its supplier in the event of a nuclear incident. Conversely, if a good or service is not subject to the part 21 requirements, it is less likely to provide a basis for a claim. This method of differentiating nuclear items is clear and certain within the nuclear industry, and provides a reasonable basis for allocating risk among nuclear suppliers.

As explained in the NOI, the Department believes that the statutory risk factors to be considered in developing the risk-informed assessment formula (see section 934(e)(2)(C)(i)) indicate that only nuclear suppliers of goods or services most likely to be exposed to significant potential liability in the event of a covered incident would be included in the retrospective risk pooling program. 75 FR 43950. Those types of suppliers are best represented as the suppliers of

goods or services specifically intended for use in structures, systems, and components related to safety at a nuclear installation. 75 FR 43951. Further, the concept of limiting the application of the rule to only those suppliers of items related to safety would operate to eliminate from consideration nuclear suppliers of goods or services that do not contribute significantly to the risk of a nuclear incident in accordance with the exclusion factors in subsection 934(e)(2)(C)(ii)(I), such as classes of goods and services with negligible risk and goods and services not intended specifically for use in a nuclear installation in accordance with subsection 934(e)(2)(C)(ii)(I)(aa), (bb). 75 FR 43950-43951. The majority of the commenters agreed that this approach would be a reasonable implementation of the statutory risk factors, specifically, the direction to DOE to consider factors such as the nature and intended purpose of the goods and services (934(e)(2)(C)(i)(I)) and the hazards associated with such goods and services should they fail to achieve the intended purposes (934(e)(2)(C)(i)(III)).

In addition, this approach provides an objective benchmark for nuclear suppliers. Nuclear suppliers whose goods and services, if supplied in the United States, would be subject to the NRC's part 21 requirements can be certain what goods or services they supply abroad are subject to reporting requirements of the proposed rule. As discussed further below, only covered nuclear suppliers (or their successors in interest) are required to report to the Department their prior and annual reportable transactions for purposes of applying the risk-informed assessment formula in the event of a request for funds. Not all transactions by a covered nuclear supplier are a reportable transaction, however. A "reportable transaction" means any transaction by a covered nuclear supplier involving the supply of items specified in appendices A and B (Alternative 1) or the items identified in the definition of "reportable transaction" in section 951.3 (Alternative 2). Accordingly, an entity may be a nuclear supplier as defined under the Act and regulation, but

only subject to the reporting requirements of the proposed rule if it is a covered nuclear supplier engaged in reportable transactions as defined in the regulation. Further, a nuclear supplier may have reportable transactions, but would only be assessed a risk premium payment on the basis of its "covered transactions."

The Department seeks comment on whether NRC's part 21 regulations, or some other regulatory requirement or concept such as the quality assurance requirements in 10 CFR part 50, appendix B, are appropriate criteria to determine which nuclear suppliers should be defined as a covered nuclear supplier.

Covered transaction and final nuclear supplier. A "covered transaction" is a reportable transaction where a nuclear supplier is the final nuclear supplier to a covered installation. The term "final nuclear supplier" is defined in the proposed rule as: the nuclear supplier that obtains, where required, an NRC general or specific license under 10 CFR part 110, Department of Commerce export license under 15 CFR part 734, or DOE authorization under 10 CFR part 810 for the export of the item(s) involved in a reportable transaction. The terms "covered transaction" and "final nuclear supplier" are proposed to identify which nuclear suppliers are obligated to pay a risk premium with respect to what type of good or service.

The Department received numerous comments on the dynamic nature of the nuclear industry both domestically and abroad, and the difficulty many suppliers would have in tracking with certainty whether their good or service were supplied to a foreign nuclear installation. For example, many commenters noted that their goods may be incorporated into other nuclear goods which ultimately may or may not be exported, and that it is impossible to ascertain whether their good has been supplied to a covered installation for reporting purposes or otherwise.

Commenters argued against imputing to nuclear suppliers an intent to export a good or service when none can be shown or known, and argued for certainty in identifying the pool of nuclear suppliers that are supplying goods or services to foreign nuclear installations. One commenter suggested using export licenses, authorizations, or other such approvals as criteria.

Recognizing these concerns on a practical and policy level, the Department is proposing that only final nuclear suppliers, i.e., the nuclear suppliers that obtain the applicable export license or authorization, be the nuclear supplier covered by the retrospective risk pooling program. A final nuclear supplier is proposed to be defined in effect as a covered person who obtains or relies on licenses from the Department of Commerce under 15 CFR part 734 or NRC under 10 CFR part 110, or authorizations from DOE under 10 CFR part 810 to manufacture, provide or produce facilities, equipment, fuel or services specifically for use in covered installations outside the United States. Only the final nuclear supplier can report with certainty on the timing, destination, value and quantity of exported goods or services. This information is essential in developing and implementing any risk-informed assessment formula. The Department believes that this is a fair and equitable approach to allocate risk among United States nuclear suppliers. The final nuclear supplier will have the ability, if desired, to negotiate with its suppliers to recuperate any potential costs or liability it will bear under the proposed rule. Such cost and risk allocation among nuclear suppliers is best left to the industry to manage on its own terms as a business arrangement, rather than by the Department through regulation. Also, the final nuclear supplier is the person most identifiable to the covered installation at which the nuclear incident occurs, and therefore the person most likely to be subject to potential liability in the event of a covered incident. Precisely because of this fact, it is the final nuclear supplier that is most in need of and benefitted by the protections of the Convention. Limiting the transactions covered

by the regulation to those of a final nuclear supplier represents the most reasonable, fair and manageable approach available to the Department and responds to concerns expressed by commenters on the NOI.

In sum, under either Alternative 1 or 2, a nuclear supplier would be part of the retrospective risk pooling program and obligated to make a risk premium payment if the nuclear supplier: (1) supplied goods or services specified in the appendices (Alternative 1) or included in the nuclear sector (Alternative 2) that, if supplied in the United States, would be subject to the requirements of 10 CFR part 21; (2) obtained the necessary export licenses or authorizations to supply those goods or services; and (3) supplied those goods or services to nuclear installations that are covered by the CSC, i.e., covered installations.

Covered installation. The Department proposes to define the term "covered installation" as it is in the Act. A "covered installation" is a nuclear installation at which the occurrence of a nuclear incident could result in a request for funds under the Convention. Such a nuclear incident would be an incident that exceeds the amount available under the first tier of compensation, equivalent to roughly 300 million SDRs, or about \$460 million, and occurred in a State that is a Contracting Party (CSC member State) to the Convention. (If the incident were to occur in the United States, the first tier of compensation would be covered by the Price-Anderson Act.) Several commenters noted that the rule should make clear that the term "covered installation" means only nuclear installations in a CSC member State. One commenter noted that the legislative history of section 934 suggests the Department is not limited to only countries that have ratified the Convention, but should also include countries that have signed the Convention or are likely to join in a reasonable period of time. After considering these comments, the Department is proposing that a covered installation is a nuclear installation in a

CSC member State at the time of the nuclear incident for which the contribution to the international supplementary fund is made. While flexibility and breadth of application may be desirable in some respects, in the end the United States would only be called upon to contribute to a nuclear incident in a CSC member State, and therefore the risk premium – and potential liability avoided by operation of the Convention – should be calculated based upon transactions with nuclear installations only in CSC member States.

Comments also were received that the Convention definition of "nuclear installation" was not sufficiently explicit to allow nuclear suppliers to identify the covered installations outside the U.S. to which the Convention would apply. It was suggested that DOE post a list of those covered installations in member countries, so that only those facilities would be provided Convention protection. The Convention provides for a list of nuclear installations at Article VIII, which requires that each Contracting State communicate to the Depositary a complete listing of all nuclear installations referred to in Article IV.3, meaning a list of all nuclear reactor installations in the member country. Further, the Convention definition is sufficiently explicit as to the type of facilities that would qualify for coverage, and CSC member States would be a matter of public record

(http://www.iaea.org/Publications/Documents/Conventions/supcomp\_status.pdf), such that U.S. nuclear suppliers are reasonably able to determine the type of facility at which a nuclear incident may result in a request for funds. The Department does not believe that another list is necessary or appropriate to implement the rule but seeks comment from the public on this suggestion.

Nuclear installation. "Nuclear installation" is not defined in the Act; however, as noted above, it is defined in the Convention. The Convention has differing definitions of "nuclear installation;" the applicable definition depends upon the installation state where the incident

occurs and the nuclear liability instrument in effect in that State, e.g., the Vienna or Paris Convention, or, if a Contracting Party does not belong to either of those Conventions, then the definition in Article 1.1(b) of the Annex to the Convention (Annex). For the United States, there is an additional option for defining a nuclear installation under Annex Article 2.3. As noted previously in the NOI, DOE intends to apply the Annex Article 2.3 definition of "nuclear installation" for covered incidents within the United States. However, for covered incidents outside the United States, the Department would apply the Annex Article 1.1(b) definition as the retrospective risk pooling program applies only to covered incidents outside the United States. Thus, the appropriate reference point for the type of nuclear installation that constitutes a covered installation would be the Paris Convention, Vienna Convention or Annex Article 1.1(b), depending on whether the Paris Convention, Vienna Convention, or the Annex was the applicable law for the country where the nuclear incident occurred. As a practical matter, these definitions are essentially the same.

In this proposed rule, the definition of "nuclear installation" closely mirrors that in Article 1.1(b) of the Annex. Some revisions were made to the definition for simplicity and clarity, e.g., the word "factory" used in the Annex, was replaced with the somewhat broader or more commonly used phrase "facility or plant" to ensure all nuclear installations are covered. More simply put, the Department interprets the definition of "nuclear installation" in the Convention, and in the proposed rule, to mean the following types of nuclear installations: civilian nuclear power reactors, civilian nuclear research or test reactors, nuclear fuel fabrication facilities, spent or used nuclear fuel reprocessing facilities, uranium enrichment facilities, and storage facilities for "nuclear materials" as defined in the Convention, which would include storage facilities for spent nuclear fuel and radioactive wastes (except for storage of nuclear materials incidental to

the transport of such materials). In addition, as the definition provides, where there are several nuclear installations of one operator at a single site, for example, a single site with multiple reactor units, the installation state would determine whether this represents a single nuclear installation or multiple nuclear installations. In the case of the United States as the Installation State, a single site with multiple reactor units would be considered a single nuclear installation.

Commenters argued for the exclusion of certain nuclear facilities from the definition of a "nuclear installation," and the Department independently considered what installations properly fit within the definition of a nuclear installation. One commenter noted that DOE should expressly exclude from the definition of "covered installation" nuclear waste disposal facilities, e.g., low-level waste disposal facilities, on the basis that disposal facilities are distinct from storage facilities, and only the latter facilities are included in the Convention definition of a "nuclear installation." Other commenters from the uranium mining, milling and conversion industries noted that they are not nuclear suppliers under the Act because their products and services - natural uranium concentrates and conversion of natural uranium to uranium hexaflouride - are not nuclear "fuel" and require several intervening and separate actions to be transformed into a form that can be used as fuel for a reactor. Commentors also noted that natural uranium as mined or converted into uranium hexafluoride presents negligible risk to a covered facility, and could not reasonably be considered a proximate cause or contribution to a nuclear incident giving rise to a call for funds under the Convention. Further, the Department notes that natural uranium is excluded from the definitions in the Convention of "nuclear fuel" and "nuclear material".

Based on the foregoing, the Department concludes that the definition of "nuclear installation" does not include radioactive waste disposal facilities or uranium mining, milling and conversion

facilities. Uranium mining, milling and conversion facilities do not fall within the definition of "nuclear installation" as they do not involve the use of nuclear fuel or nuclear material as defined in the Convention. In addition, DOE agrees that suppliers of natural or depleted uranium or uranium conversion services are not suppliers of fuel and thus not nuclear suppliers that would be subject to the requirements of this proposed rule. Finally, we agree that the definition of "nuclear installation" does not cover radioactive waste disposal facilities which are distinct from storage facilities. NRC treats storage and disposal activities under separate regulations (e.g., 10 CFR parts 60, 61, and 72), as does DOE in regard to requirements for its activities (e.g., DOE Manual 435.1, where disposal is defined as "emplacement of waste in a manner that ensures protection from the public, workers, and the environment with no intent of retrieval and that requires deliberate action to regain access to the waste" and storage means "the holding of radioactive waste for a temporary period, at the end of which the waste is treated, disposed of, or stored elsewhere."). This distinction is also recognized on the international level, in the Joint Convention on Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, to which the United States is a party, in the differing definition and treatment of those concepts in practice. Accordingly, radioactive waste disposal facilities are not a covered installation, and suppliers of goods or services to radioactive disposal facilities are not subject to the requirements of this proposed rule.

Nuclear material. The Department defines "nuclear material" as it is defined in the Convention. The Convention, Annex Article 1, includes a definition of "nuclear material" that specifies nuclear material means nuclear fuel, other than natural uranium and depleted uranium, capable of producing energy by a self-sustaining chain process of nuclear fission outside a nuclear reactor, and radioactive products or waste. "Radioactive products or waste" has its own

definition in the Convention, which is incorporated verbatim in this proposed rule. "Radioactive products or waste" are defined as radioactive material produced in, or any material made radioactive by exposure to the radiation incidental to the production or utilization of nuclear fuel. However, radioactive material does not include radioisotopes, which have been fabricated and are usable in any scientific, medical, agricultural, commercial or industrial purpose.

The Department interprets the Convention definition of "nuclear material" to include nuclear materials such as enriched uranium, nuclear fuel, irradiated (spent) nuclear fuel, and radioactive wastes, and to exclude as nuclear materials natural uranium, depleted uranium, and radioisotopes in usable form.

Covered person. The definition of "covered person" is significant in that a nuclear supplier, as defined in the Act, is a covered person or a successor in interest to a covered person. The Department defines "covered person" as it is defined in the Act. A covered person includes any United States person, or any individual or entity (including an agency or instrumentality of a foreign country) that is located in the United States or carries out an activity in the United States. DOE interprets this definition broadly. For example, a foreign company that carries out any activity in the United States and exports from the United States nuclear goods or services would be a covered person. On the other hand, an example of an entity that is not a covered person would be a U.S. company that provides goods or services to a foreign nuclear installation but does so under contract to the United States government. The statutory definition of "covered person" excludes "(i) the United States; or (ii) any agency or instrumentality of the United States." Section 934(b)(6)((B). Under such circumstances, a U.S. company would not be considered a covered person for purposes of that activity and therefore would not be included within the retrospective risk pooling program. DOE notes that a company may provide goods

and services to a foreign installation both on its own account (i.e., not for the United States government), and for the United States government; such company would be considered a "covered person" for its private transactions only.

## Subpart B – Retrospective Risk Pooling Program

Alternatives 1 and 2 are described separately in the following discussion of Subpart B, with the exception of the role of the Department and the retrospective risk premium payment cap.

Both of these topics are presented in the discussion of Alternative 1 but are the same under both alternatives. The role of the Department is set forth at section 951.4 under both alternatives, while the retrospective risk premium payment cap is set forth at section 951.10 in Alternative 1 and section 951.16 in Alternative 2. As noted previously, Alternative 1 would establish a risk-assessment formula based on goods or services provided by a nuclear supplier, while Alternative 2 would establish a risk-assessment formula based on nuclear sectors.

# Alternative 1 - Risk-Informed Assessment Formula by Nuclear Goods and Services

Section 951.4 – Role of the Department

Section 951.4 provides for the role of the Department in the event there is a request of the United States for funds under the Convention. The amount requested of the United States, that is, the contingent cost, will be based on the rules and formula in the Convention for allocating costs among CSC member States (Article IV). The contingent cost will be a fixed amount, e.g.,

<sup>&</sup>lt;sup>7</sup> DOE notes that Subparts A (except for the definitions of covered transaction and reportable transaction), C and D, are also the same for Alternative 1 and 2.

\$150 million. DOE's role is to allocate that amount among the U.S. nuclear suppliers based upon the risk-informed assessment formula set forth in the rule.

Within 60 days of a request for funds under the Convention, the Department will calculate the retrospective premium payment owed by each nuclear supplier based upon the risk-informed assessment formula. Notification to nuclear suppliers will be provided in the **Federal Register**. Payment requirements for nuclear suppliers are set forth in subpart C of this proposed rule.

Section 951.5 - Retrospective premium payment

A nuclear supplier's retrospective premium payment will be calculated based on the nuclear supplier's share of the contingent cost owed by the United States under the Convention. Each nuclear supplier will be assessed a pro-rata share of the costs based on its share of the risk. The risk share, which is a function of the supplier's risk exposure, is expressed as a percentage of the contingent cost, so that the retrospective premium for each nuclear supplier is its risk share (e.g., 2%) multiplied by the contingent cost (e.g., \$150 million), resulting in the amount of the retrospective premium payment (e.g., \$3 million). The "risk" that is the subject of this risk-informed assessment formula, and the basis for the risk premium payment, is the risk that a nuclear supplier's goods or services would provide the basis for a claim against the supplier in

<sup>&</sup>lt;sup>8</sup> The numbers provided in the text and as parentheticals are examples only, and not intended to represent an actual case.

<sup>&</sup>lt;sup>9</sup> The numbers provided in the text and as parentheticals are examples only, and not intended to represent an actual case. The following hypothetical amounts illustrate how the formula would work, where it is assumed that: contingent cost = \$150 million; aggregate risk exposure = \$500 million; nuclear supplier's covered transactions = \$4 million from Appendix A, and \$2 million from Appendix B.

Retrospective Premium Payment = risk share [.02] x contingent cost [\$150,000,000] = \$3,000,000 Risk share = risk exposure [\$10,000,000]/aggregate risk exposure [\$500,000,000] = .02 or 2% Risk exposure = (value of covered transactions from Appendix A x 2) [\$4,000,000 x 2] + (value of covered transactions from Appendix B x 1) [\$2,000,000 x 1] = \$8,000,000 + \$2,000,000 = \$10,000,000

the event of a nuclear incident at a covered installation that would give rise to a call for funds under the Convention.

Section 951.6 – Risk Share, Section 951.7 – Risk Exposure, and Section 951.8 – Aggregate Risk Exposure

A nuclear supplier's risk share is their relative risk exposure compared to the aggregate risk exposure of all U.S. nuclear suppliers. Based upon the information gathered under subpart D for reporting transactions, the Department would calculate the amount of each nuclear supplier's risk exposure and the overall or aggregate risk exposure of U.S. nuclear suppliers. The aggregate risk exposure is simply the sum of all nuclear suppliers' risk exposure. The risk exposure of a nuclear supplier is the adjusted value of all covered transactions of that nuclear supplier, weighted as either 2 (items listed in appendix A) or 1 (items listed in appendix B) in accordance with the risk associated with the goods or services provided. Appendix A contains a list of primary nuclear items, meaning items with a greater likelihood of contributing to a nuclear incident resulting in a call for funds, and therefore such items are given twice the weight as items listed in appendix B. Appendix B contains a list of secondary nuclear items, meaning items with less likelihood of contributing to a nuclear incident resulting in a call for funds. Each nuclear supplier's risk exposure is calculated as the sum of the adjusted value of all their covered transactions, appropriately weighted. The aggregate risk exposure is the sum of all nuclear suppliers' risk exposures. A nuclear supplier's risk share is then calculated, i.e., the nuclear supplier's risk exposure divided by the aggregate risk exposure.

The most important variable in the equation is the nuclear suppliers' covered transactions. A covered transaction under Alternative 1 is defined as "any reportable transaction by which a nuclear supplier is the final nuclear supplier to provide any of the items listed in appendix A or B

for use in the design, construction, operation or decommissioning of any covered installation or in the transportation of material to or from a covered installation." Section 951.3. The definition of covered transaction provides important indicators of what nuclear suppliers will have covered transactions (only those that are reportable and made by final nuclear suppliers).

First, the transactions used in the risk-informed assessment formula must be reportable transactions. Reportable transactions are transactions of a "covered nuclear supplier," engaged in after a certain date as specified in the rule, to provide any of the items listed in the appendices for use in the design, construction, operation, or decommissioning of any nuclear installation outside the United States or in the transportation outside the United States of nuclear material to or from a nuclear installation. Accordingly, not every transaction of a nuclear supplier is a reportable transaction. Reportable transactions are those transactions: (1) made by a covered nuclear supplier, meaning a nuclear supplier that supplies goods or services, if supplied in the United States, that would be subject to the requirements of 10 CFR part 21; (2) occurring after 1959 (i.e., starting January 1, 1960) for items listed in appendix A, and after 2007 (i.e., starting January 1, 2008) for items listed in appendix B; (3) for items listed in the appendices, rather than all nuclear goods or services. The transactions must also be for items used in: (1) nuclear installations outside the United States, so that nuclear items supplied to domestic nuclear installations are not included; or (2) the transportation outside the United States of nuclear material to or from a nuclear installation, so that transport transactions are limited to transport of nuclear material outside the United States, and between nuclear installations outside the United States.

Second, the transactions used in the risk assessment formula must be made by a "final nuclear supplier." As previously explained, many commenters noted that it can be very difficult to

determine whether a nuclear item has been exported and used in a foreign nuclear installation, as many items are sold directly to other entities within the United States, who may export them as is or in combination with other items, and their ultimate end use destination is not known. On the other hand, the entity that exports the nuclear item (i.e., the final nuclear supplier) whether as a single item or in combination with other items, will know that the item is being exported for use in a nuclear installation outside the United States. By limiting covered transactions to those involving final nuclear suppliers, the rule operates to encompass those nuclear suppliers for which records can be reliably kept and maintained on nuclear items supplied to foreign nuclear installations, or nuclear materials transported between foreign nuclear installations. Further, this approach addresses the concern expressed by some commenters that the rule should be clear that it applies only to suppliers of goods or services to foreign installations, and does not apply to suppliers of goods or services solely to domestic installations.

Further, the time period of reference in calculating the risk premium is the period starting from the date of reportable transactions (either after 2007 or 1959 for certain suppliers) until the date of the nuclear incident. Several commenters noted that the period of assessment should be on a rolling basis, for example a five-year period, prior to the nuclear incident. The Department believes this formulation may be too restrictive and fail to cover nuclear suppliers whose goods or services may have contributed to a nuclear incident and therefore should be liable for their share of the contingent costs. Except for nuclear suppliers of items in appendix A (and suppliers to the facility sector in Alternative 2, discussed below), all other nuclear suppliers would have reportable transactions after 2007, when section 934 was enacted. Suppliers of items in appendix A would have reportable transactions after 1959, when many of the foreign nuclear installations that would be covered installations under the CSC were constructed and began operations.

Development of a risk-assessment formula equitable to all nuclear suppliers requires looking back to 1960 for nuclear suppliers who would have been the most likely to have supplied goods or services to nuclear installations at which a nuclear incident may occur, and who would benefit from the protections of the Convention. To do otherwise would improperly place the majority of the burden of the contingent costs on nuclear suppliers with more recent transactions that may have little or no relation back to those nuclear installations. Nonetheless, the Department recognizes that recordkeeping back to 1960 may be challenging, and seeks comment from the public on the probability and feasibility of collecting information from that timeframe.

In developing the risk-informed assessment formula, the Department considered the risk factors set forth in section 934 along with its own experience and expertise to arrive at a quantifiable formula and develop the appendices to the rule. Section 934(e)(2)(C). As explained in the NOI, DOE interpreted these risk factors to support an approach that focuses on goods or services specifically intended for use in structures, systems, and components important to safety at a nuclear installation as the goods and services to be ranked and used in calculating the risk premium. 75 FR 43950-43951. Following this approach, the appendices identify particular nuclear goods and services and assigns to those goods or services a risk rating or ranking — primary or secondary — and a corresponding weight — 2 or 1 — that is then multiplied by the adjusted value of the goods or services exported and added together to equal a nuclear supplier's risk exposure.

The Department received many comments on how it must develop additional information to adequately assess and assign the risk factors. Few of the commenters, however, provided explicit recommendations on risk ratings for specific categories or types of nuclear goods or services. Most commenters expressed doubt that the Department could objectively establish a

risk ranking for specific nuclear goods and services with sufficient support to provide a credible basis for the rule. While the Department acknowledges the difficulty of the task, the Department believes it has proposed a rule that fulfills the statutory mandate in an equitable manner.

The Department believes the items defined in appendix A are the primary components, equipment, systems, and structures that, by their design, are intended to protect the public health and safety from operational events and plant transients (design basis or beyond design basis events) that could cause nuclear incidents within the purview of the Convention. These items were drawn from DOE's knowledge and experience in the history and operation of various nuclear facilities, as well as the NRC regulatory structure and emphasis on the importance of safety in nuclear operations. In addition, the Department recognizes that other nuclear items identified in appendix B may also cause a covered event but considers the likelihood and severity of those events to be secondary to, or of lower risk, than, those items in appendix A. Hence, the items are weighted differently to reflect this risk allocation. The Department seeks public input on the risk sharing classification of covered items in the appendices, and suggestions for additions or deletions from the list and the supporting bases for those suggestions as available.

Section 951.9 – Small nuclear supplier exclusion

Section 951.9 proposes an exclusion from payment of the retrospective risk premium for small nuclear suppliers. All commenters supported such an exclusion, and section 934 expressly provides for DOE to exclude nuclear suppliers with a de minimis share of the contingent costs. 934(e)(2)(C)(ii). In this proposed rule, the Department proposes two alternatives for determining whether a nuclear supplier is excluded from payment as a "small" supplier. First, DOE proposes to determine a small nuclear supplier based on an amount of risk exposure that is "de minimis," such as \$1 million. One commentor suggested nuclear suppliers with less than \$1 million in

annual total sales to covered nuclear installations may be considered "de minimis." DOE seeks public comment on this and other potential amounts. The amount established in the rule must take into account the consideration that it not be set too low, as risk exposure may be based on many years of transactions, or too high, as the intent is to focus the application of the rule on nuclear suppliers that are the most likely to be subject to claims for damage resulting from a nuclear incident giving rise to nuclear damage in excess of 300 million SDRs. In the alternative, the Department proposes excluding all suppliers that qualify as "a small business" in accordance with size standards established by the Small Business Administration (SBA), on the basis that such suppliers are unlikely to be subject to claims for damage. The Department welcomes additional comment and feedback from the public on what dollar amount or other criterion, such as classification as a "small business" under SBA size standards, is reasonable to use for the exclusion of small nuclear suppliers.

#### Section 951.10 – Retrospective premium payment cap

Section 951.10 proposes a cap on the retrospective premium payment for any one nuclear supplier, to be specified in the rule as a specific dollar limit or a percentage of the contingent cost. All commenters supported a cap on premiums, arguing that a cap would provide predictability to the program thereby allowing nuclear suppliers to plan and potentially insure themselves against the risk of a premium payment in the future. Also, many commenters believed a cap was a means to equitably apportion the contingent costs and insure no one supplier was unduly burdened with the majority of the cost.

In response to these comments, the Department is proposing to include such a cap in the rule.

DOE seeks comment on the amount or percentage of the contingent cost that is appropriate as a

cap on any one supplier's premium payment. As a basis for additional comment from the public, the Department is considering amounts such as 5%, or 25%, of the contingent cost, or a specific dollar amount, e.g., \$25,000,000, as suggested by several commenters.

While the Department supports a cap, it is required that the United States government be paid in full by nuclear suppliers the same amount as the United States government is obligated to contribute as a CSC party under the Convention. Accordingly, the proposed rule provides for assessing additional premium payments from the nuclear suppliers that have not reached the cap on payments in the event there is a shortfall in payments from suppliers with respect to the United States' obligation. The additional payments would be allocated on a pro rata basis, consistent with each nuclear supplier's share of risk as calculated under the rule, and shall operate until a nuclear supplier reaches the cap or the shortfall is met, whichever occurs first. In the unlikely event this process results in each nuclear supplier reaching the cap on payments and the shortfall is not met, then all nuclear suppliers will be assessed a pro rata share of the remaining shortfall until funds in the amount of the United States' contribution have been paid to the Treasury. The Department welcomes additional comment and feedback from the public on the process for ensuring the United States is fully paid by nuclear suppliers the amount it is obligated to contribute under the Convention.

#### Alternative 2 – Risk-Informed Assessment Formula by Nuclear Sector

Section 951.5 – Nuclear supplier sectors

Section 951.5 groups nuclear suppliers in accordance with the sector of the nuclear industry to which they provide goods or services. This approach groups suppliers based on the commonality of the type of goods or services they supply and the risk that those goods or services would

contribute to a nuclear incident. The Department believes categorizing nuclear suppliers in this manner is a useful and equitable mechanism to reflect the allocation of risk among nuclear suppliers. Also, this approach is consistent with the concept suggested by several commenters that DOE assign risk by looking at the stages of the nuclear fuel cycle, where each stage would be grouped in accordance with its relative risk as a contributor to a nuclear incident. The nuclear supplier sectors are: (1) facility; (2) equipment and technology; (3) nuclear material and nuclear material transportation; and (4) services. The Department believes it has defined nuclear sectors in a reasonable and workable manner but welcomes suggestions from the public on other ways to define nuclear sectors, e.g., defining the sectors based upon the stages of the fuel cycle or by installation type.

As described in the rule, the first sector is the facility sector, which encompasses nuclear suppliers that are the lead suppliers involved in the development and deployment of nuclear installations. The term "lead supplier" is defined in the proposed rule as a nuclear supplier whose adjusted value of reportable transactions for the period from January 1, 1960 through 2007 exceeds \$500 million, or some other amount to be determined by DOE based on consideration of public comment. By establishing as the benchmark for defining a lead nuclear supplier a dollar value of reportable transactions of that supplier over the period 1960 through 2007, the Department intends to capture in this sector those suppliers that could have been characterized as the primary supplier to a nuclear installation. For example, many of the reactors in existence today were constructed and installed several decades ago and, at that time, there was a single nuclear supplier that led in the design, component, equipment and technology supply of the reactor. In essence, the lead supplier is the nuclear supplier that supplied the nuclear installation as a whole, and not merely individual components or parts that make up the whole.

The Department recognizes that there has been a shift in the nuclear industry, and current business arrangements among suppliers and nuclear installation operators are not necessarily structured as in the past. For this reason, the facility sector is backward looking (that is, looking back from 2007 when section 934 was enacted), and only comprises those nuclear suppliers that qualify as a lead supplier of a nuclear installation for the period 1960 through 2007. Nuclear suppliers that fit within the facility sector would only report transactions for the period from January 1, 1960 through December 31, 2007; for transactions after 2007 (the year of enactment) it is expected that nuclear suppliers would fit into one or more of the other nuclear sectors. Limiting the time period for operation of the facility sector reflects the structure of the nuclear industry in the past and present, while allocating the costs equitably among nuclear suppliers based on the likelihood their goods or service would contribute to a nuclear incident occurring at a nuclear installation.

Moreover, this approach is reasonable in terms of recordkeeping and transaction reporting. It is less likely that a nuclear supplier, other than the lead supplier, would have records of their transactions dating back to the initial operation of most of the nuclear installations in existence today -- precisely the installations at which a nuclear incident may occur. Therefore, the lead suppliers of those installations should be assessed a proportionate share of the contingent costs. Further, it is most likely that the lead supplier to a nuclear installation built decades ago would also be the final nuclear supplier, i.e., the nuclear supplier that obtained the necessary licenses and/or authorizations for the export of the nuclear goods and services comprising the nuclear installation. In sum, the facility sector represents the group of nuclear suppliers operating in the 1960 through 2007 time period, a period in which most nuclear installations were developed and deployed and were in large part supplied by a single nuclear supplier of significant resources and

expertise, and for which records of the supply transactions would exist today and form an equitable basis to allocate risk and costs among them. The Department seeks comment on what other descriptors of a lead supplier would be appropriate to be included in the proposed rule to further clarify the definition of facility sector nuclear suppliers.

The remaining three nuclear sectors are the equipment and technology sector, the nuclear material and nuclear material transportation sector, and the nuclear services sector. These sectors cover only reportable transactions of a nuclear supplier occurring from January 1, 2008 onward. These sectors reflect the more current business structure of the nuclear supplier industry, with suppliers specializing in specific goods or services and managing risks and costs among the suppliers as part of their business arrangement. The equipment and technology sector encompasses nuclear suppliers of equipment, components and technology used in a nuclear installation. This sector captures the nuclear suppliers that provide the multitude of equipment, component parts and technology to a nuclear installation, but would not be a lead supplier. The nuclear material and nuclear material transportation sector encompasses suppliers of nuclear material to a nuclear installation and the suppliers that transport nuclear material between installations. This sector captures suppliers such as those that furnish fresh fuel to a reactor, or irradiated nuclear fuel to a reprocessing facility, as well as the suppliers that provide transportation of fresh fuel or irradiated fuel between nuclear installations. The nuclear services sector encompasses suppliers of services to a nuclear installation for the design, construction, operation or decommissioning of a nuclear installation. This sector captures suppliers of services to a nuclear installation, such as operating services, and architecture, engineering and construction services.

DOE notes that although there may be overlap among these three sectors (e.g., a nuclear supplier may supply both nuclear equipment and services), each sector was developed because it can be reasonably distinguished from the other sectors in terms of the nuclear items supplied and the relative risk of those items. As previously noted, the sectors are based on the expectation that the nuclear suppliers falling within each sector would be similarly situated in terms of the relative risk of their goods or services contributing to a claim for damages related to a covered incident, and their capacity to have reliable and extant records of their transactions to support an allocation of cost among them. If a supplier provides goods or services to more than one sector, the supplier would calculate their risk premium payment for covered transactions within each sector, with the total payment the sum of the premium for each sector.

The Department believes the four nuclear sectors fairly represent the nuclear supplier industry as a whole and the suppliers to the nuclear industry that should be part of the retrospective risk pooling program. The Department also believes the nuclear sectors are similar to an approach proposed by some commenters to categorize suppliers in relation to their place within the fuel cycle (e.g. front-end or back-end suppliers), but welcomes additional comment from the nuclear industry on whether this approach is appropriately structured and alternative suggestions.

# Section 951.6 – Retrospective premium payment

A nuclear supplier's retrospective premium payment will be calculated based on the nuclear supplier's risk share of the contingent costs allocated to the nuclear sector in which the supplier is grouped. Each nuclear supplier will be assessed a pro-rata share of the allocated costs within their nuclear sector based on their share of risk within that sector. The risk share by sector is expressed as a percentage, and the allocated cost is a fixed number, so that the retrospective

premium for each nuclear supplier is their risk share by sector (e.g., 4%) multiplied by the allocated cost by sector (e.g., \$75 million), resulting in the amount of the retrospective premium payment (e.g., \$3 million)<sup>10</sup>. Suppliers may be grouped in multiple sectors in accordance with the goods or services they supplied, and the retrospective premium would be the sum of the risk premium for each sector. As in Alternative 1, the "risk" that is the subject of this risk-informed assessment formula, and the basis for the risk premium payment, 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 at a covered installation that would give rise to a call for funds under the Convention.

Each nuclear sector has an allocated risk by sector and Section 951.9 – Allocated cost by sector

Each nuclear sector has an allocated risk based upon the relative risk that the goods or

services supplied within that sector would contribute to a nuclear incident that could result in a
call for funds. Each nuclear sector also would have an allocated cost, which is the product of the
allocated risk of the sector multiplied by the contingent cost. For example, the facility sector
has an allocated risk of 50 percent, meaning that that sector has been determined to be likely to
contribute 50 percent, or half, of the risk of a nuclear incident at a covered installation giving rise

<sup>&</sup>lt;sup>10</sup> The numbers provided in the text and as parentheticals are examples only, and not intended to represent an actual case. The following hypothetical amounts illustrate how the formula would work, where it is assumed that: contingent cost = \$150 million; nuclear supplier's covered transactions = 1 nuclear reactor; allocated risk for facility sector = 50%; and aggregate risk exposure of the facility sector = 50.

Retrospective Premium Payment = risk share [.04] x allocated cost facility sector [\$75,000,000] = \$3,000,000 Risk share = risk exposure of nuclear supplier [2]/aggregate risk exposure of facility sector [50] = .04 or 4% Allocated cost facility sector = allocated risk by sector [50%] x contingent cost [\$150,000,000] = \$75,000,000 Risk exposure of nuclear supplier = quantity of all covered transaction of nuclear supplier [1] x 2 = 2.

to a call for funds under the Convention. If the contingent cost is \$150 million, the allocated cost to the facility sector is \$75 million. The same logic follows with the other sectors: the equipment and technology sector has an allocated risk of 25 percent; the nuclear materials and nuclear material transportation sector has an allocated risk of 15 percent; and the services sector has an allocated risk of 10 percent. The Department derived the allocated risk amounts based on its knowledge of the history and experience in the nuclear industry and the likelihood of the goods and services within a nuclear sector contributing to a nuclear incident of the kind for which the United States government would be required to make a payment under the Convention. In the NOI, commenters were reluctant to attribute a specified amount of risk to any given nuclear supplier sector or good or service. Because quantifiable risk amounts are essential for the risk-assessment formula, however, the Department has proposed amounts it believes appropriate and reasonable. Commenters are encouraged to propose alternative amounts and provide any and all supporting information and data for those amounts for consideration by the Department. Further, section 934(e)(2)(C)(i) requires DOE to determine the risk-based formula, by rule, every 5 years after it is originally established by regulation. Therefore, the Department notes that if this risk allocation becomes inequitably weighted because of the passage of time and other circumstances, the risk allocation for each nuclear sector would be revised as appropriate to match the relative risks among the nuclear sectors at that time.

Section 951.7 – Risk share by sector and Section 951.10 – 951.14 Risk Exposure by sectors

The risk share of a nuclear supplier is expressed in terms of its relative risk exposure within a sector. A nuclear supplier's risk exposure is a function of the nuclear supplier's proportional share of the aggregate risk exposure of all nuclear suppliers within the sector, weighted as a 2 or

1 in accordance with the risk associated with the good or service supplied. Each nuclear sector has its own risk exposure calculation. The aggregate risk exposure by sector is the sum of the risk exposure of all nuclear suppliers within that sector.

The risk exposure of a nuclear supplier to the facility sector is derived by first determining the quantity of all covered transactions by the nuclear supplier of a nuclear plant or a facility for the reprocessing of irradiated nuclear fuel, multiplying that number by 2, and second determining the quantity of all covered transactions of the supplier of facilities or plants for the processing of nuclear material (except facility for reprocessing irradiated nuclear fuel), or facilities where nuclear material is stored, multiplying that number by 1. The products of these two determinations are added together, and the resulting sum is then used to calculate the risk exposure of the nuclear supplier within the facility sector by comparing that number to the aggregate risk exposure of all nuclear suppliers (derived in the same manner as the risk exposure of a single nuclear supplier) in that sector. A very similar calculation is used to derive the risk exposure in the other three sectors. In each sector, a weighting of 2 is allocated to the facilities, equipment, technology, nuclear material storage facilities, nuclear material transportation and services that are associated with nuclear installations that are either a nuclear plant or a facility for the reprocessing of irradiated nuclear fuel. This weighting reflects the Department's judgment, based on its experience and expertise that those types of nuclear installations have a higher probability of experiencing a nuclear incident resulting in a call for funds under the Convention than other nuclear installations, and thus the nuclear goods or services supplied to them have a higher probability of contributing to such an incident. A weighting of 1 is allocated to the facilities, equipment, technology, nuclear material storage facilities, nuclear material transportation and services that are associated with nuclear installations that are a nuclear

material processing facility, a nuclear material storage facility, or associated with nuclear material transportation. This weighting reflects the Department's judgment, based on its experience and expertise, that those types of nuclear installations have a lower probability of experiencing a nuclear incident resulting in a call for funds under the Convention than other nuclear installations, and thus the nuclear goods or services supplied to them have a lower probability of contributing to such a nuclear incident.

The main difference in the calculation of the risk exposure between the sectors is the way covered transactions are accounted for: the facility sector and the nuclear materials and nuclear transportation sector calculate risk exposure as a function of the quantity of the goods supplied in a covered transaction; the equipment and technology and services sectors calculate exposure as a function of the adjusted value of the goods or services supplied in a covered transaction. The Department proposes this distinction as a better means of calculating the relative share of a supplier's exposure within each sector. In the former two sectors, the quantity of nuclear installations supplied and the quantity of nuclear material supplied or transported better represent the market share and associated risk exposure of that nuclear supplier than the value of the good or service provided. For example, a nuclear supplier that supplied 10 nuclear reactors versus a nuclear supplier of 5 nuclear reactors would be expected, generally speaking, to have doubled the risk exposure of contributing to a nuclear incident regardless of the value of the nuclear reactors supplied. On the other hand, for the latter two sectors, the adjusted value of a supplier's covered transactions would be a better representation of its market share and associated risk exposure than the quantity supplied. For example, a nuclear supplier of equipment and technology may supply an item in a large quantity but of small value and vice versa. In such cases, the supplier's proportionate share of the market in that sector and associated risk is better represented by the

value of its covered transactions than the quantity. This is particularly true of nuclear services, which is not a discrete item that can be quantified as such.

Some commenters on the NOI noted the complexity of identifying an appropriate metric to use in apportioning the contingent cost among nuclear suppliers either individually or as a group. Nevertheless, one way identified by commenters is to use the value or revenue from a nuclear supplier's covered transactions; this is the approach proposed in Alternative 1. Alternative 2 identifies the two ways discussed in the preceding paragraphs, recognizing the differences in the nature of the transactions by nuclear suppliers in the different sectors. The Department believes the approaches in Alternative 1 and 2 have merit, and requests comment on the metrics presented for both of these alternatives.

#### Section 951.15 - Small nuclear supplier exclusion

The exclusion for small nuclear suppliers is in concept the same in Alternative 2 as in Alternative 1, with some differences resulting from approaches taken in the alternatives (i.e., goods and services in Alternative 1 and nuclear sectors in Alternative 2). The first difference lies in the method of assessing the risk exposure of a nuclear supplier that forms the basis for the exclusion. In Alternative 2, a small nuclear supplier may be excluded based on a risk exposure of less than a dollar amount, e.g., \$1,000,000, for nuclear suppliers in the equipment and technology sector and the services sector, or a risk exposure less than a quantity amount, e.g., 1,000 MT of nuclear material, for nuclear suppliers in the nuclear materials and nuclear materials transportation sector. This is consistent with the method for calculating risk exposure under Alternative 2. As in Alternative 1, the Department is open to comment on what dollar amounts

or quantity amounts are an appropriate basis for exclusion, as well as whether exclusion on the basis of being defined as a small business under SBA size standards is appropriate.

The second difference pertains to nuclear suppliers in the facility sector: the Department is not proposing a small nuclear supplier exception for nuclear suppliers in the facility sector.

Given the composition of nuclear suppliers in that sector, the Department does not believe there are any nuclear suppliers – even suppliers of only one nuclear installation – that warrant treatment as a small nuclear supplier. The Department seeks comment on this aspect of its proposed rule for small nuclear supplier exception.

#### Subpart C – Payments to the United States

General Rule - Section 951.11 (Alternative 1) – 951.17 (Alternative 2)

The requirements of subpart C are prescribed in section 934(h)(1) of the Act. This section states the general rule that nuclear suppliers are required to pay the entire risk premium within 60 days of receipt of notification from the Department that payment is due, unless they elect to prorate their payment in 5 equal annual payments. The payment is to be made to the general fund of the U.S. Treasury. The amount is calculated in accordance with the formula in subpart B.

In the event amounts provided by the nuclear suppliers are insufficient to cover the United States' full contribution at the time it is due, for example, if suppliers elect to prorate their payments over 5 years in accordance with section 934(h)(1)(B)(ii), the United States may be required to seek an appropriation in order to meet its full contribution requirement. In the event such an appropriation is enacted, as in the example noted in the preceding sentence, the funds appropriated would be used to pay United States' government obligations and would be reimbursed by nuclear suppliers' prorated payments per section 934(h)(1)(B)(ii). The

Department seeks comment on several facets of a nuclear supplier's obligation and options to fulfill the risk premium payment requirement. For example, the Department is interested in comments on the proposed payment plans and any alternative options for payment plans that meet the United States government's obligations under the CSC and are consistent with section 934. In addition, the Department seeks comment on whether nuclear suppliers should be required to demonstrate that they have an adequate financial mechanism (such as a state-administered fund, bond, private insurance, or certificate of deposit) to ensure the availability of financial resources sufficient to cover the risk premium payment to ensure full and timely payment to the United States government. DOE is also seeking comment on the feasibility, cost and necessity of demonstrating the adequate availability of funds, and whether such a financial demonstration, if appropriate, should be a mandatory or discretionary requirement for suppliers.

Annual payments - Section 951.12 (Alternative 1) - Section 951.18 (Alternative 2)

This section implements section 934(h)(1)(B)(ii) of the Act, which permits a nuclear supplier to prorate their payment into 5 equal payments due annually. The 5 annual payments must include interest on the unpaid balance at the prime rate prevailing at the time the first payment is due.

Vouchers - Section 951.13 (Alternative 1) – Section 951.19 (Alternative 2)

This section implements section 934(h)(1)(C) of the Act, which requires a nuclear supplier to submit payment certification vouchers to the Secretary of Treasury in accordance with 31 U.S.C. 3325. To fulfill the requirement of section 934, nuclear suppliers would submit a voucher to the Secretary of Treasury consistent with 31 U.S.C. 3325 in regard to: proper form; certified and approved; and computed correctly based on the facts. Nuclear suppliers would submit the voucher to the Secretary of Treasury concurrent with the payment to the general fund. The

voucher would be in the form of a letter signed by an official with authority to bind the company that certifies the payment made to the general fund of the Treasury is made pursuant to the Department's notification under section 951.4, the amount is computed correctly, and the specifics of the payment plan, e.g., the amount paid, the date of payment, and details of the payment plan: one-time, or in 5 equal amounts annually.

Failure to pay - Section 951.14 (Alternative 1) - Section 951.20 (Alternative 2)

As permitted under section 934(h)(3), the Department may penalize a nuclear supplier for failure to pay the required risk premium. This section of the proposed rule states that the Department shall recover from a nuclear supplier that does not pay the risk premium no later than 60 days after receipt of a notification: (1) the amount of the payment due; (2) any applicable interest on the payment at the prime rate prevailing at the time the first payment is due; and (3) a penalty of not more than twice the amount of the payment due from the nuclear supplier.

The Department has made the penalty payment mandatory in the proposed rule. Payment by nuclear suppliers on a timely basis is critical to the proper functioning of the regulation and the ability of the United States to timely meet its international commitments. The penalty provisions of section 934(h)(3) indicate Congressional intent to hold nuclear suppliers to their obligation to fully fund payments due from the United States under the CSC, with interest added to late payments and a penalty imposed – in addition to the premium payment - of up to double the amount of the premium payment due for suppliers that fail to pay on time and in the amounts required. Accordingly, the Department proposes the penalties for failure to pay the risk premiums on time and in full be mandatory, strictly enforced, and assessed in full, except in the

case of extraordinary circumstances. The Department seeks comment on whether the penalty payment due should be discretionary, and what factors may be appropriate and considered by the Department to mitigate the penalties or support a claim of extraordinary circumstances in the case of a delinquent supplier.

#### Subpart D – Information Collection

Reporting requirements for prior transactions - Section 951.15 (Alternative 1) - Section 951.21 (Alternative 2) - Reporting requirements for prior transactions

Section 934(f) of the Act permits the Department to collect information from nuclear suppliers as necessary to develop and implement the formula for calculating the risk premium payments. This section requires a report, within 6 months of the effective date of the regulation, from nuclear suppliers regarding each reportable transaction they have had prior to the effective date of any final regulations. The report must be certified and signed by an official with authority to bind the company. The information necessary for the Department to calculate the risk premium includes: the date and description of each reportable transaction; the location of the nuclear installations involved in each transaction; identification of the volume or quantity of each item involved in a reportable transaction; the value of each identified item, and the total value for each reportable transaction.

Importantly, the information to be reported pertains only to "reportable transactions" as defined in the proposed rule, and therefore not all transactions and not all nuclear suppliers are subject to the reporting requirements. As previously described, a reportable transaction is a transaction by a covered nuclear supplier that: (1) occurred after a certain date as specified in Alternative 1 or 2; and (2) involves only those items or nuclear sectors identified in the proposed rule. The transaction must also involve nuclear goods or services supplied to a foreign nuclear

installation or transportation outside the United States of nuclear material to or from a nuclear installation.

The Department received several comments about reporting requirements under the rule. Most commenters believed the existing reporting on nuclear exports was inadequate to provide the information required for implementation of section 934, and that additional reporting by nuclear supplier would be necessary although not desirable. The Department is aware that existing reporting mechanisms may not be sufficient to meet its needs and therefore proposes in this rule to require the necessary information be provided by nuclear suppliers. DOE notes, however, that many of the qualifications in the rule regarding who needs to report and what transactions need to be reported operate to, among other things, minimize the impact of reporting requirements on nuclear suppliers. Not all transactions of all nuclear suppliers are required to be reported. The Department believes that the rule is structured such that the reporting requirements for nuclear suppliers are circumscribed and manageable, and would not cause undue burden on the nuclear industry. The Department seeks comment from the public on several aspects of its reporting requirements: whether the 6 month period for reporting on prior transactions is adequate; the number of nuclear suppliers affected by the reporting requirements; the impact of the requirements on those nuclear suppliers in terms of burden hours, capital/startup costs and competitiveness; and suggestions for alternative methods or criteria to streamline the reporting requirements while achieving the objectives of the law.

Annual reporting requirements - Section 951.16 (Alternative 1) - Section 951.23 (Alternative 2)

In addition to a one-time report on prior transactions, this section institutes an annual reporting requirement due by March 15<sup>th</sup> of each year for transactions in the prior year. The

same information required for prior transactions would be required on an annual basis. The annual reporting requirement enables the Department to maintain and compile records on reportable transactions that can be readily accessed in the event there is a nuclear incident and a call for funds under the Convention.

Disclosure requirements - Section 951.17 (Alternative 1) - Section 951.23 (Alternative 2)

This section provides the disclosure requirements for information provided to the Department under the reporting requirements of this subpart. Information reported to the Department may be subject to public disclosure unless the information is protected from disclosure under the Freedom of Information Act and DOE implementing regulations. While the Department does not believe the reporting requirements involve information that would be trade secrets or other proprietary information, the proposed rule provides protection from disclosure for such information that is appropriately marked and upon a satisfactory showing to the Department that the information should not be disclosed under applicable law.

#### Appendices

The appendices to Alternative 1 of the proposed rule contain the lists of nuclear goods and services that form the basis for determining the risk premium payment, and are subject to reporting by nuclear suppliers as reportable transactions. The Department reviewed available and relevant data and information on nuclear goods and services, in particular those nuclear goods and services that are important to safety, to determine the risk or the likelihood that each such good or service would contribute to legal liability for a nuclear incident that would require a call for funds under the Convention.

The items in the appendices were derived from information and data in NRC regulations and associated guidance, the Commerce Control List (CCL), and relevant international guidance documents. The NRC regulations and guidance relied upon include: Regulatory Guide 1.26, "Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants," Revision 4 (March 2007); NUREG 0800 Standard Review Plan, Revision 2 (March 2007) (e.g., section 3.2.2); 10 CFR part 50, "Domestic Licensing of Production and Utilization Facilities," (e.g., subsection 50.2, 50.55a, and Appendices A and B); 10 CFR part 21; and 10 CFR part 110, "Export and Import of Nuclear Equipment and Material (e.g., Appendix A). In particular, appendix A to 10 CFR part 110, which provides an illustrative list of nuclear reactor equipment for export licensing authority, was a useful reference point for compiling the list of primary nuclear items for appendix A to the proposed rule. Several of the items in appendix A to this rule, and 10 CFR part 110, appendix A, also appear in the CCL, 15 CFR 774.2, Supplement 1, "Category 0-Nuclear Materials, Facilities and Equipment", although export of these items is subject to regulation by NRC, not Commerce. Several commenters recommended 10 CFR part 110 to the Department for consideration of nuclear items that could reasonably be assigned the highest level of responsibility and liability for contingent costs.

In addition, items on the list were derived from relevant international references, such as the IAEA Information Circulars INFCIRC/254/Part 1 as revised and INFCIRC/209 as revised. The IAEA Information Circulars are the Nuclear Suppliers Group and Zangger Committee Guidelines and technical annexes. These technical annexes comprise the list of nuclear materials, equipment, facilities, and technologies that are controlled by the members of the Nuclear Suppliers Group and Zangger Committee. The United States is a founding member of

both export control regimes and the lists are the basis of the DOE's and NRC's export control regulations.

The following provides a description of each appendix and the items contained therein. The Department welcomes comments and suggestions from the nuclear industry on other sources not addressed here that are relevant and supportive of the items listed in the appendices.

#### Appendix A – List of Primary Nuclear Items

This list contains items the Department deemed most likely to contribute to a nuclear incident that would result in a call for funds, taking into account the risk factors identified in section 934 and other relevant data and information. The list includes safety-related systems, structures and components subject to QA requirements (Quality groups A, B and C), and that are relied upon to mitigate the consequences of nuclear plant events or accidents.

#### *Appendix B – List of Secondary Nuclear Items*

This list contains the items the Department deemed secondarily likely to contribute to a nuclear incident that would result in a call for funds, taking into account the risk factors identified in section 934 and other relevant data and information. The items listed include systems, structures and components of a nuclear installation that are subject to QA requirements and perform a nuclear function albeit not a direct safety function, for example, waste processing or fuel handling. The list of items does not include balance-of-plant equipment<sup>11</sup>; however, as such items perform no nuclear or safety-related function.

#### III. Issues on Which DOE Seeks Comment

<sup>&</sup>lt;sup>11</sup> Balance-of-plant equipment generally refers to plant structures, systems and components used to generate electricity but not part of the nuclear and safety systems. Such systems are typically comprised of the turbine-generator and associated control lubricating oil and cooling systems; main condenser, condensate and condensate polishing; condenser cooling water, steam and feedwater; auxiliary boilers ventilation; fire protection and associated electrical, instrumentation and control systems; electrical transformers; and building structures.

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

National Export Initiative. The Department seeks additional commentary and specific information from the nuclear industry on the potential impacts to U.S. competitiveness in the nuclear export arena and the President's National Export Initiative. The Department is also interested in receiving comment on which alternative regulation, the first or the second, is better suited to mitigate the impacts, if any, on United States' competitiveness in the nuclear export arena.

Covered nuclear supplier. The Department seeks comment on whether NRC's part 21 regulations, or some other regulatory requirement or concept such as the quality assurance requirements in 10 CFR part 50, Appendix B, are appropriate criteria to determine which nuclear suppliers should be defined as a covered nuclear supplier.

List of covered installations. The Department seeks additional commentary from the public on the suggestion that it produce a list of the nuclear installations outside the United States that would be covered installations under the Convention.

Alternative 1- risk ranking in appendices. The appendices in the proposed rule identify particular nuclear goods and services to which they assign a risk rating or ranking- primary or secondary- and a corresponding weight - 2 or 1. The Department seeks comment from the public on the risk sharing classification of covered items in the appendices and suggestions, with supporting bases, for additions or deletions from the list.

Alternative 1- small nuclear supplier exclusion. The Department seeks comment on what dollar amount or other criterion, such as classification as a "small business" under SBA size standards, is reasonable to use for exclusion of small nuclear suppliers.

Alternative 2- small nuclear supplier exclusion. The Department seeks comment from the public on what dollar or quantity amounts are an appropriate basis for exclusion, as well as whether exclusion on the basis of being defined as a "small business" under SBA size standards is appropriate. The Department also seeks comment on whether there are any nuclear suppliers in the facility sector that would or should qualify for the small nuclear supplier exception.

Retrospective premium payment cap. The Department proposes a cap on the retrospective premium payment for any one nuclear supplier. The Department seeks comment from the public on a specific amount, such as \$25 million, or percentage of contingent cost, such as 5% or 25%, that is appropriate as a cap on any one supplier's premium payment. The Department welcomes additional comment and feedback from the public on the process for ensuring the United States' is paid in full by nuclear suppliers for its contributions under the Convention.

Alternative 2- nuclear supplier sectors. The nuclear supplier sectors proposed in the rule are:

(1) facility; (2) equipment and technology; (3) nuclear material and nuclear material transportation; and (4) services. The Department seeks comment on other ways to define nuclear sectors (e.g., defining the sectors based upon the stages of the fuel cycle or by installation type).

Alternative 2 - lead nuclear supplier. The Department seeks comment on the descriptor of a lead nuclear supplier appropriate for inclusion in the rule to further clarify the definition of facility sector nuclear suppliers.

Alternative 2- nuclear sectors. The Department seeks comment from the nuclear industry on whether the nuclear sector approach is appropriately structured, should be defined in the rule, and alternative suggestions.

Alternative 2- allocated risk by sector. Each nuclear sector has an allocated risk based upon the relative risk that the goods or services supplied within that sector would contribute to a nuclear incident that could result in a call for funds. The Department encourages commenters to propose alternative risk allocation amounts per sector, accompanied by any and all supporting information and data for those amounts.

**Risk share calculation.** The Department seeks comment on the metrics proposed in Alternatives 1 and 2 associated with the calculation of a supplier's risk share.

Payments to the United States. The Department seeks comments from the public on the proposed payment plans whereby, in accordance with section 934(h)(1)(B)(i) and (ii), nuclear suppliers must pay the required deferred payment to the general fund of the Treasury within 60 days after notification by the Secretary, or elect to prorate payment in 5 equal annual payments (including interest on the unpaid balance at the prime rate prevailing at the time the first payment is due). The Department seeks comment on the proposed payment plans and any alternative options for payment plans that meet the United States government's obligations under the CSC and are consistent with section 934. The Department is also seeking comment on whether nuclear suppliers should be required to demonstrate that they have an adequate financial mechanism (such as a state-administered fund, bond, private insurance, or certificate of deposit) to ensure the availability of financial resources sufficient to cover the risk premium payment to ensure full and timely payment to the United States government. Comments may address the

feasibility, cost and necessity of demonstrating the adequate availability of funds, and whether such a financial demonstration, if appropriate, should be a mandatory or discretionary requirement for suppliers.

**Failure to pay.** The Department has proposed a mandatory penalty payment. The Department seeks comment on whether the penalty payment should be discretionary, and what factors may be appropriate and considered by the Department to mitigate the penalties or support a claim of extraordinary circumstances in the case of a delinquent supplier.

**Appendices.** The Department welcomes comments and suggestions from the nuclear industry on other sources not addressed here that are relevant and supportive of the items listed in the appendices.

Reporting requirements. The Department seeks comment from the public on several aspects of its reporting requirements: whether the 6 month period for reporting on prior transactions is adequate; the number of nuclear suppliers affected by the reporting requirements; the impact of the requirements on those nuclear suppliers in terms of burden hours, capital/start-up costs, and competitiveness; and suggestions for alternative methods or criteria to streamline the reporting requirements while achieving the objectives of the law. In addition, the Department requests comment on the probability of a nuclear supplier having records of transactions dating back to 1960, the feasibility of supplier's meeting the reporting requirements for those transactions, and appropriate mechanisms for DOE to determine the information submitted is complete and accurate.

**Impact on small entities.** DOE has proposed two alternative-risk-assessment methods and requests comment on whether either alternative would result in a lower impact on small entities.

The Department requests comment from the public on any other alternatives that could minimize impacts on small entities.

Collection of information. The Department seeks comment on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of information to be collected; (d) ways to minimize the burden of the collection of information, including the use of automated collection techniques or other forms of technology; and (e) ways to determine the information collected is complete and accurate.

#### IV. Public Participation

## A. Information Session

DOE will hold an information session open to the public on January 7, 2015, from 10:00 AM to 12:00 noon in Washington, DC. The information session will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue, SW., Washington, DC 20585-0121. To attend, please notify Ms. Brenda Edwards at (202) 586-2945 or by e-mail: Brenda.Edwards@ee.doe.gov.

The session will be conducted by DOE to provide interested parties with an overview and description of the proposed rulemaking to facilitate review and comment by the public.

Members of the public are welcome to attend the meeting, and, if time allows, a question and answer may be held. DOE does not expect participants to be prepared to offer substantive comments on the proposed rulemaking before or at the information session. DOE plans to hold

public workshop(s) on the proposed rulemaking at a later date within the comment period that will provide the public with an expanded opportunity to comment orally and in writing on the proposed rulemaking. The date, time and place of such workshops will be announced in subsequent **Federal Register** notice(s).

## B. Attendance at the Information Session

The information session will be conducted in an informal style by DOE. There shall be no discussion of proprietary information, costs or prices, market shares, or other commercial matters. A court reporter will record the proceedings of the public meeting, and a transcript will be posted on the DOE website at <a href="http://www.energy.gov/gc/convention-supplementary-compensation-rulemaking">http://www.energy.gov/gc/convention-supplementary-compensation-rulemaking</a>.

Please note that foreign nationals participating in the information session are subject to advance security screening procedures which require advance notice prior to attendance at the information session. If a foreign national wishes to participate in the public meeting, please inform DOE of this fact as soon as possible by contacting Ms. Brenda Edwards at (202) 586-2945 or by e-mail to <a href="mailto-Brenda.Edwards@ee.doe.gov">Brenda.Edwards@ee.doe.gov</a> so that the necessary procedures can be completed.

DOE requires visitors with laptop computers to be checked upon entry into the building. Any person wishing to bring these devices into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing these devices, or allow an extra 45 minutes to check in. Please report to the Visitors' Desk to have devices checked before proceeding through security.

Due to the REAL ID Act, implemented by the Department of Homeland Security (DHS), there have been recent changes regarding ID requirements for individuals wishing to enter Federal buildings from specific states and U.S. Territories. Drivers' licenses from the following states or territory will not be accepted for building entry and one of the alternate forms of ID listed below will be required. DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington. Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; and Enhanced Driver's License or Enhanced ID-Card issued by the states of Minnesota, New York, or Washington (Enhanced licenses issued by these states are clearly marked Enhanced or Enhanced Driver's License) or military ID or other Federal government issued Photo-ID card.

## V. Regulatory Review Requirements

## A. Review Under Executive Order 12866

The Department has determined that this regulatory action is an "economically significant action under Executive Order 12866, "Regulatory Planning and Review" (58 FR 51735, October 4, 1993), as amended by Executive Order 13258 (67 FR 9385, February 26, 2002). Accordingly, the Department submitted this NOPR to the Office of Information and Regulatory Affairs in the Office of Management and Budget, which has completed its review under E.O. 12866.

This discussion assesses the potential costs and benefits of this notice of proposed rulemaking.

This regulation affects United States nuclear suppliers that meet the requirements for contribution to the retrospective risk pooling program established by the proposed regulation. U.S. nuclear suppliers that qualify for participation in the retrospective risk pooling program would be assessed

a pro-rata share of the contingent cost the United States government is required to contribute to the international supplementary fund under the Convention in the event of a covered nuclear incident. The United States government's cost (to be funded by U.S. nuclear suppliers) would be determined pursuant to the rules of the Convention and, though the amount is dependent on external factors such as the nuclear rated capacity of a CSC member state, could be in the range of \$150 million. Any single U.S. nuclear supplier's cost, referred to as the retrospective premium payment, is dependent upon application of the risk-informed assessment formula. DOE proposes two alternative formulas for calculating the retrospective premium payment. Under either formula, a U.S. nuclear supplier's premium payment is a function of the risk share of the nuclear supplier relative to other nuclear suppliers; a nuclear supplier's risk share (e.g., 2 %) is multiplied by the contingent cost (e.g., \$150 million) to derive the premium payment owed by the nuclear supplier (e.g., \$3 million). While the exact number of U.S. nuclear suppliers potentially affected by this rule and the amount they would owe is not specifically known, the proposed rule is structured to exclude certain nuclear suppliers (e.g., small nuclear suppliers), and impose a cap on costs to any one nuclear supplier (e.g., \$25 million). These and other measures in the proposed rule are intended to limit the population of nuclear suppliers affected by the rule to those suppliers most likely to be exposed to claims for damage resulting from a nuclear incident and therefore are most likely to benefit from the rule.

The benefits of the proposed rule to a U.S. nuclear supplier far outweigh the costs of the rule. Outside of the Convention, U.S. nuclear suppliers are not covered by a global nuclear liability regime that provides consistent rules for dealing with legal liability. U.S. nuclear suppliers are faced with a multitude of legal regimes in a variety of foreign countries to which they supply nuclear goods or services, creating potential legal liabilities in uncertain forums and in amounts

that could reach many millions or tens of millions and well above the costs contemplated in the proposed rule. As a CSC member state, the United States and its nuclear suppliers benefit from the principles of nuclear liability law followed by all CSC member states, such as channeling legal claims to the nuclear operator and limiting litigation to the courts in the member state where the nuclear incident occurred. These principles not only operate to provide prompt and equitable compensation to victims of a nuclear incident, they provide stability and, in effect, insurance to U.S. nuclear suppliers when engaging in commercial transactions with nuclear installations abroad. The potential cost to a nuclear supplier is relatively small by comparison to these benefits. Indeed, the potential cost to a nuclear supplier may never even accrue and would be zero, as the premium payment is deferred and not owed unless and until a covered incident occurs, while the benefits of the Convention would accrue as soon as it goes into effect and are not dependent on payment of the premium.

#### B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires that an agency prepare an initial regulatory flexibility analysis for any regulation for which a general notice of proposed rulemaking is required, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities (5 U.S.C. 605(b)). As required by Executive Order 13272, "Proper Consideration of Small Entities in Agency Rulemaking," 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of General Counsel's web site (<a href="http://energy.gov/gc/guidance-">http://energy.gov/gc/guidance-</a>

opinions-0). DOE reviewed the proposed rule under the provisions of the RFA and the procedures and policies published on February 19, 2003.

As a result of this review, DOE has prepared an IRFA for small nuclear suppliers, a copy of which DOE will transmit to the Chief Counsel for Advocacy for the Small Business

Administration (SBA) for review under 5 U.S.C. 605(b). As presented and discussed below, the IFRA describes potential impacts on small nuclear suppliers and discusses alternatives that could minimize these impacts. A statement of the reasons, objectives and legal basis for the proposed rule is set forth elsewhere in the preamble and is not detailed here. The other requirements of section 5 U.S.C. 603(b) are addressed below.

## 1. Description and Estimated Number of Small Entities Regulated

DOE used the SBA's small business size standards to determine whether any small entities may be subject to the requirements of the rule. See 13 CFR part 121. The size standards are listed by North American Industry Classification System (NAICS) code and industry description and are available at <a href="http://www.sba.gov/sites/default/files/files/Size\_Standards\_Table.pdf">http://www.sba.gov/sites/default/files/files/Size\_Standards\_Table.pdf</a>. Given the variety and differences in goods and services that U.S. nuclear suppliers may supply to foreign nuclear installations, DOE estimates that U.S. nuclear suppliers may fit within one or more sectors and codes listed in the NAICS, including but not limited to: 1) manufacturing sector, NAICS 238990, "All Other Specialty Trade Contractors" (size limit of \$14 million), NAICS 332996, "Fabricated Pipe and Pipe Fitting Manufacturing" (size limit 500 employees), NAICS 336999, "All Other Transportation Equipment Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees), and NAICS 33999, "All Other Miscellaneous Manufacturing" (size limit 500 employees).

500 employees); retail trade sector, NAICS 454319, "Other Fuel Dealers" (size limit \$7 million); and professional, scientific and technical services sector, NAICS 541690 "Other Scientific and Technical Consulting Services" (size limit \$7 million).

Given the variety and differences among goods and services provided by U.S. nuclear suppliers, and the possibility that some nuclear suppliers would not fall within the exclusions in the proposed rule for small nuclear suppliers, DOE assumes that some nuclear suppliers may meet the SBA's definition of a small business whose goods or services may be covered by this rulemaking. DOE notes that it is considering exclusion of small nuclear suppliers that meet the SBA size standard for a small business. Under this approach, small businesses would not be impacted by the rule.

## 2. Description and Estimate of Compliance Requirements

The proposed rulemaking requires a nuclear supplier subject to the retrospective risk pooling program make one initial and thereafter annual reports to the Department regarding its reportable transactions of exported nuclear goods or services to foreign installations. In the event of a nuclear incident at a covered nuclear installation, nuclear suppliers would be required to make a retrospective premium payment to provide funds totaling in the aggregate the amount of the United States government's contribution under the Convention. The retrospective premium payment would entail the primary costs to a small nuclear supplier under the rule (assuming for analysis purposes they are a small nuclear supplier that has not been excluded from operation of the rule); it is not expected that reporting costs would be substantial for a small business. These compliance requirements do not require any capital investments, improvements, or other production costs or changes to small business operations.

The cost of compliance, or the premium payment, owed by a nuclear supplier is prorated based on its risk exposure and risk share relative to other nuclear suppliers. Because risk exposure and risk share are a function of the value and/or volume of goods or services exported by a nuclear supplier, as calculated under either Alternative 1 or 2 in the preamble discussion of Subpart B above, it is expected that a small nuclear supplier's prorated share of the total contingent cost — estimated to be at most approximately \$150 million — would be small relative to other nuclear suppliers with more significant transactions in value or quantity. In any event, the amount owed by any one nuclear supplier would be limited, as the proposed rule also includes a proposed cap on premium payments. This proposed rule suggests a cap of \$5 million or some other amount or percentage of the total contingent cost, with a request for comment and alternative suggestions on the amount of this cap. The combination of these factors ensures that small businesses would be minimally impacted by the proposed rule and the cost of compliance, consistent with the requirements of section 934.

# 3. Duplication, Overlap, and Conflict with Other Rules and Regulations

DOE is not aware of any rules or regulations that duplicate, overlap, or conflict with the rule being considered today.

## 4. Significant Alternatives to the Proposed Rule

As discussed in this section and elsewhere in this proposed rulemaking, DOE is required under section 934 of the Act to promulgate a rule establishing a retrospective risk pooling program for U.S. nuclear suppliers that obligates such suppliers to provide funds in the same amount as the United States government's contingent costs for contributions under to the supplementary fund the Convention. DOE has proposed two alternative risk-assessment

methods and seeks comment on whether either of those alternatives would result in a lower impact on small entities. This proposed rule also includes mitigating and potentially exclusionary factors specifically for small businesses. This proposed rule would exclude small nuclear suppliers, which can be defined in various ways including that a nuclear supplier qualifies as a small business under the SBA regulations. This proposed rule also operates in such a manner that, if it applies, a nuclear supplier's premium payment is prorated based upon their risk share and exposure, measured in terms of value or quantity of goods sold, relative to other nuclear suppliers. Further, this proposed rule includes a cap on premium payments by any one nuclear supplier. DOE believes that this proposed rule has been structured to minimize its applicability to small businesses and, where it applies, to minimize the costs to any small nuclear supplier. DOE seeks comment on any other alternatives that could minimize the impacts on small businesses.

## C. Review Under the Paperwork Reduction Act

Section 951, subpart D, contains information collection requirements pertaining to a nuclear supplier's reportable transactions, as defined in the proposed rule, involving exports of nuclear goods or services. This information collection is authorized under section 934(f), which permits the Secretary to collect information from nuclear suppliers as necessary to develop and implement the formula for calculating the deferred payment under the retrospective risk pooling program, and requires nuclear suppliers to make available such information, reports, records, documents and other data as the Secretary determines necessary and appropriate to develop and implement the formula. This proposed rule requires a one-time report, within 6 months of the effective date of the rule, and annually thereafter, from nuclear suppliers regarding each reportable transaction they have had either since 1960 or 2007, depending upon the type of

transaction. The information to be collected pertains to a nuclear supplier's export transactions involving nuclear goods or services, including information on: description of the transaction; date of the transaction; location of the nuclear installation to which the exported item was provided; quantity of the exported item(s); and value of the exported item(s).

These provisions will not become effective until the Office of Management and Budget (OMB) has approved them pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) and the procedures implementing that Act, 5 CFR 1320.1 et seq.

The Department has submitted to OMB for clearance the collection of information in subsection D, under the provisions of the Paperwork Reduction Act of 1995. This information collection request contains: (1) OMB Number: new; (2) Information Collection Request Title: Convention on Supplementary Compensation for Nuclear Damage Contingent Cost Allocation; (3) Type of Request: new; (4) Purpose: the information to be collected is critical to implementation of the risk-assessment formula and calculation of the retrospective risk premium due by a nuclear supplier under the retrospective risk pooling program, and will require the collection and submission of information on reportable transactions by nuclear suppliers covered under the retrospective risk pooling program; (5) Annual estimated number of Respondents: 25; (6) Annual Estimated Number of Total Responses: 25; (7) Annual Estimated Number of Burden Hours: 25 hours annually, and a one-time reporting requirement totaling 100 hours; (8) Annual Estimated Reporting and Recordkeeping Cost Burden: \$8,000 annually, and a one-time reporting requirement cost of \$32,000.

The Department invites public comment on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including

whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the number of estimated respondents and the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Written comments may be sent to Sophia Angelini (see ADDRESSES) and by e-mail to OIRA\_Submission@omb.eop.gov.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

## D. Review Under the National Environmental Policy Act

DOE has reviewed these proposed regulations pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.), the Council on Environmental Quality's regulations (40 CFR parts 1500-08), and DOE's implementing regulations (10 CFR part 1021). Categorical Exclusion A6 (in Appendix A to Subpart D of 10 CFR part 1021) applies to rulemakings that are strictly procedural, and thus applies to this rulemaking. DOE has determined that there are no extraordinary circumstances related to this proposal that may affect the significance of the environmental effects of the proposal. Accordingly, DOE has determined that this action is categorically excluded from the need to prepare an environmental impact statement or an environmental assessment pursuant to NEPA.

#### E. Review Under Executive Order 13132

Executive Order 13132 "Federalism," 64 FR 43255 (August 10, 1999), requires agencies to develop an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have "federalism implications." Policies that have federalism implications are defined in the Executive Order to include regulations that have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

This regulatory action has been determined not to be a "policy that has federalism implications;" that is, it does not have substantial direct effects on the States, on the relationship between the national government and the States, nor on the distribution of power and responsibilities among various levels of government under Executive Order 13132, 64 FR 43255 (August 10, 1999).

#### F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform" (61 FR 4779, February 7, 1996) imposes on Federal agencies the general duty to adhere to the following requirements: eliminate drafting errors and needless ambiguity, write regulations to minimize litigation, provide a clear legal standard for affected conduct rather than a general standard, and promote simplification and burden reduction. Section 3(b) requires Federal agencies to make every reasonable effort to ensure that a regulation, among other things: clearly specifies the preemptive effect, if any, adequately defines key terms, and addresses other important issues affecting the clarity and general draftsmanship under guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive Agencies to review regulations in light of applicable

standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. The Department has completed the required review and determined that, to the extent permitted by law this final rule meets the relevant standards of Executive Order 12988.

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform" (61 FR 4779, February 7, 1996) imposes on Federal agencies the general duty to adhere to the following requirements: Eliminate drafting errors and needless ambiguity, write regulations to minimize litigation, provide a clear legal standard for affected conduct rather than a general standard, and promote simplification and burden reduction. Section 3(b) requires Federal agencies to make every reasonable effort to ensure that a regulation, among other things: clearly specifies the preemptive effect, if any, adequately defines key terms, and addresses other important issues affecting the clarity and general draftsmanship under guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. The Department has completed the required review and determined that, to the extent permitted by law; this final rule meets the relevant standards of Executive Order 12988.

## G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, or Tribal governments and the private sector. Pub. L. 104-4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State,

local, and Tribal government, in the aggregate, or by the private sector of \$100 million or more in any one year (adjusted for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)). The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local and Tribal governments on a proposed "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at http://energy.gov/gc/guidance-opinions-0.

Although this proposed rule does not contain a Federal intergovernmental mandate, it may impose expenditures of \$100 million or more on the private sector. Specifically, the final rule could impose expenditures of \$100 million or more for a nuclear supplier in the event that nuclear supplier's covered transactions result in a risk premium payment owed by the supplier exceeding \$100 million.

Section 202 of UMRA authorizes an agency to respond to the content requirements of UMRA in any other statement or analysis that accompanies the proposed rule. 2 U.S.C. 1532(c). The content requirements of section 202(b) of UMRA relevant to a private sector mandate substantially overlap the economic analysis requirements that apply under Executive Order 12866. The SUPPLEMENTARY INFORMATION section of this proposed rule and the analysis under Executive Order 12866 respond to those requirements.

#### H. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, "Government Actions and Interference with Constitutionally Protected Property Right," 53 FR 8859 (March 18, 1988) that this regulation would not result in any takings which might require compensation under the Fifth Amendment to the U.S. constitution.

#### I. Review Under Executive Order 13211

Executive Order 13211 ("Actions Concerning Regulations That Significantly Affect Energy, Supply, Distribution, or Use"), 66 FR 28355 (May 22, 2001) requires Federal agencies to prepare and submit to OMB a Statement of Energy Effects for any proposed significant energy action. A "significant energy action" is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use. This regulatory action would not have a significant adverse effect on the supply, distribution, or use of energy and is, therefore, not a significant energy action. Accordingly, DOE has not prepared a Statement of Energy Effects.

#### VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this NOPR.

## List of Subjects in 10 CFR Part 951

Nuclear energy, Nuclear power plants and reactors, Nuclear materials, Treaties.

Issued in Washington, D.C., on December 10, 2014.

Steven P. Croley, General Counsel.

For the reasons set forth in the preamble, the Department of Energy proposes to amend Chapter III of title 10 of the Code of Federal Regulations by adding a new part 951 to read as follows:

Alternative 1- Risk-Informed Assessment Formula by Nuclear Goods and Services

# PART 951 – CONVENTION ON SUPPLEMENTARY COMPENSATION FOR NUCLEAR DAMAGE CONTINGENT COST ALLOCATION

## Subpart A – General Provisions

Sec.

- 951.1 Purpose.
- 951,2 Scope.
- 951.3 Definitions.

# Subpart B – Retrospective Risk Pooling Program

- 951.4 Role of the Department.
- 951.5 Retrospective premium payment.
- 951.6 Risk share.
- 951.7 Risk exposure.
- 951.8 Aggregate risk exposure.
- 951.9 Small nuclear exclusion.

951.10 Retrospective premium payment cap.

#### Subpart C – Payments to the United States

- 951.11 General rule.
- 951.12 Annual payments.
- 951.13 Vouchers.
- 951.14 Failure to pay.

#### Subpart D - Information Collection

- 951.15 Reporting requirements for prior transactions.
- 951.16 Annual reporting requirements.
- 951.17 Disclosure requirements.

Appendix A to Part 951–List of Primary Nuclear Items Appendix B to Part 951–List of Secondary Nuclear Items

**Authority:** 42 U.S.C. 2201, 42 U.S.C. 17373.

#### Subpart A - General Provisions

#### § 951.1 Purpose.

This part establishes the regulations for the implementation of section 934 (42 U.S.C. 17373) of the Energy Independence and Security Act of 2007 (Pub. L. 110-140), which provides for the proration of a retrospective premium among nuclear suppliers for the insurance against potential liability for nuclear damage provided by the adherence of the United States to the Convention.

#### § 951.2 Scope.

This part covers nuclear incidents that occur outside the United States that result in a request for funds and that are not a Price-Anderson incident.

#### § 951.3 Definitions.

For purposes of this part, words shall be defined as provided for in the Atomic Energy Act and in section 934 of the Act and as follows –

Act means the Energy Independence and Security Act of 2007 (Pub. L. 110-140).

Adjusted value means the value (expressed in U.S. dollars) received by a nuclear supplier for an item, adjusted to reflect inflation from the date of the covered transaction involving the item to the date of the nuclear incident for which the retrospective premium payment of the supplier is being calculated.

Aggregate risk exposure means the sum of the risk exposures for all nuclear suppliers.

Contingent cost means the cost to the United States in the event of a covered incident the amount of which is equal to the amount of funds the United States is obligated to make available under paragraph 1(b) of Article III of the Convention.

Convention means the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997.

Covered incident means a nuclear incident the occurrence of which results in a request for funds under the Convention.

Covered installation means a nuclear installation at which the occurrence of a nuclear incident could result in a request for funds under the Convention.

Covered nuclear supplier means a nuclear supplier whose goods or services, if supplied in the United States, would be subject to the requirements of 10 CFR part 21.

Covered person means-

## (1) A United States person; or

- (2) An individual or entity (including an agency or instrumentality of a foreign country) that is located in the United States, or carries out an activity in the United States; but
- (3) Does not include the United States or any agency or instrumentality of the United States.

Covered transaction means any reportable transaction by which a nuclear supplier is the final nuclear supplier to provide any item listed in appendix A or B of this part for use in the design, construction, operation, or decommissioning of any covered installation or in the transportation of material to or from a covered installation.

Department means the United States Department of Energy.

Final nuclear supplier means the nuclear supplier that obtains, where required, an NRC general or specific license under 10 CFR part 110, Department of Commerce export license under 15 CFR part 734, or DOE authorization under 10 CFR part 810, for the export of the item(s) involved in a reportable transaction.

#### Nuclear installation means:

- (1) Any nuclear reactor facility or plant other than one with which a means of sea or air transport is equipped for use as a source of power, whether for propulsion thereof or for any other purpose;
- (2) Any facility or plant using nuclear fuel for production of nuclear material, or any facility or plant for the processing of nuclear material, including any facility or plant for the reprocessing of irradiated nuclear fuel; and

(3) Any facility or plant where nuclear material is stored, other than storage incidental to the carriage of such material; provided that the Installation State may determine that several nuclear installations of one operator which are located at the same site shall be considered a single nuclear installation.

Nuclear material means nuclear fuel, other than natural or depleted uranium, capable of producing energy by a self-sustaining chain process of nuclear fission outside a nuclear reactor, either alone or in combination with some other material, and radioactive products or waste, where radioactive products or waste means any radioactive material produced in, or any material made radioactive by exposure to the radiation incidental to the production or utilization of nuclear fuel, but does not include radioisotopes which have reached the final stage of fabrication so as to be usable for any scientific, medical, agricultural, commercial or industrial purpose.

Nuclear supplier means a covered person (or a successor in interest of a covered person) that -

- (1) Supplies facilities, equipment, fuel, services, or technology pertaining to the design, construction, operation, or decommissioning of a covered installation, or
  - (2) Transports nuclear materials that could result in a covered incident.

*Price-Anderson incident* means a covered incident for which section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) would make funds available to compensate for public liability (as defined in section 11 of that Act (42 U.S.C. 2014)).

Reportable transaction means any transaction by a covered nuclear supplier after 1959 to provide any item listed in appendix A of this part, or after 2007 for items listed in appendix B of this part, for use in the design, construction, operation, or decommissioning of any nuclear

installation outside the United States or in the transportation outside the United States of nuclear material to or from a nuclear installation.

Request for funds means a request for funds pursuant to Article VII of the Convention.

Secretary means the Secretary of Energy.

*United States* means, when used in a geographic sense, the same as the definition of the term in section 11 of the Atomic Energy Act of 1954 and includes the Commonwealth of Puerto Rico, any other territory or possession of the United States, and the waters of the United States territorial sea under Presidential Proclamation Number 5928, dated December 27, 1988 (43 U.S.C. 1331 note).

United States person means -

- (1) Any individual who is a resident, national, or citizen of the United States (other than an individual residing outside of the United States and employed by a person who is not a United States person); and
- (2) Any corporation, partnership, association, joint stock company, business trust, unincorporated organization, or sole proprietorship that is organized under the laws of the United States.

Subpart B - Retrospective Risk Pooling Program

§ 951.4 Role of the Department.

Within 60 calendar days of a request for funds, the Department shall calculate the retrospective premium payment for each nuclear supplier in accordance with the rules set forth in this subpart and notify each nuclear supplier though publication in the **Federal Register**.

#### § 951.5 Retrospective premium payment.

The retrospective premium payment for a nuclear supplier shall be the product of the risk share of the nuclear supplier and the contingent cost.

#### § 951.6 Risk share.

The risk share of a nuclear supplier shall be the quotient of the risk exposure of the nuclear supplier divided by the aggregate risk exposure.

#### § 951.7 Risk exposure.

The risk exposure of a nuclear supplier shall be the sum of the following products:

- (a) The adjusted value of all covered transactions by the nuclear supplier to the extent such transaction involve items listed in appendix A of this part multiplied by 2; and
- (b) The adjusted value of all covered transactions by the nuclear supplier to the extent such transactions involve items listed in appendix B of this part multiplied by 1.

## § 951.8 Aggregate risk exposure.

The aggregate risk exposure is the sum of the risk exposure of all nuclear suppliers.

## § 951.9 Small nuclear supplier exclusion.

A nuclear supplier with a risk exposure of less than [amount, e.g., \$1,000,000 or some other amount, or exclusion for a nuclear supplier that qualifies as a "small business" under Small Business Administration codes] shall not be assessed a retrospective premium payment and shall not be included in the aggregate risk exposure and calculation of retrospective premium payments for other nuclear suppliers.

## § 951.10 Retrospective premium payment cap.

- (a) The retrospective premium payment of a nuclear supplier shall not exceed [insert amount, e.g., 5%, 25%, or some other percentage; or a dollar amount, e.g., \$25,000,000, or some other dollar amount] of the contingent cost, except as provided in paragraph (c) of this section.
- (b) In the event the retrospective premium payments assessed from all nuclear suppliers subject to this subpart does not equal the contingent cost owed by the United States, the difference shall be assessed on a pro rata basis consistent with the process in this subpart against those nuclear suppliers that have not reached the cap on premium payments established under paragraph (a) of this section.
- (c) If the retrospective premium payments assessed from all nuclear suppliers pursuant to paragraphs (a) and (b) of this section does not equal the contingent cost owed by the United States, then the difference shall be assessed as an additional premium payment on a pro rata basis consistent with the process in this subpart against all nuclear suppliers in an amount necessary to cover the United States' contingent cost in full.

## **Subpart C - Payments to the United States**

#### § 951.11 General rule.

Except as provided in § 951.12, not later than 60 calendar days after receipt of a notification from the Department under § 951.4, a nuclear supplier shall pay to the general fund of the Treasury the retrospective premium payment calculated under subpart B of this part.

#### § 951.12 Annual payments.

A nuclear supplier may elect to prorate the retrospective premium payment calculated under subpart B of this part in 5 equal annual payments (including interest on the unpaid balance at the prime rate prevailing at the time the first payment is due, no later than 60 days after receipt of a notification from the Department under § 951.4).

#### § 951.13 Vouchers.

A nuclear supplier shall make payments required under this Part by submitting a letter, concurrent with payment to the general fund under § 951.11, signed by an official with authority to bind the company to the Secretary of the Treasury that certifies —

- (a) The amount paid is made pursuant to the Department's notification under § 951.4;
- (b) The amount paid is correctly computed; and
- (c) The specific payment plan chosen by the nuclear supplier, either a one-time payment or 5 equal annual payments (including interest on the unpaid balance at the prime rate prevailing at the time the first payment is due, no later than 60 days after receipt of a notification from the Department under § 951.4).

## § 951.14 Failure to pay.

If a nuclear supplier fails to make a payment required under this part, the Secretary shall take appropriate action to recover from the nuclear supplier —

- (a) The amount of the payment due from the nuclear supplier;
- (b) Any applicable interest on the payment; and
- (c) A penalty of not more than twice the amount of the payment due from the nuclear supplier.

#### Subpart D - Information Collection

## § 951.15 Reporting requirements for prior transactions.

Not later than six months after the effective date of this subpart, a nuclear supplier shall submit electronically a report to the Department signed by an official with authority to bind the company that certifies the following information with respect to each reportable transaction prior to the effective date of this subpart;

- (a) Description of the transaction;
- (b) Date of the transaction;
- (c) Location of nuclear installation(s) involved in the transaction;
- (d) Identification of the volume or quantity of each item listed in appendix A or B of this part involved in the transaction; and
- (e) Value (expressed in U.S. dollars) of each identified item, and the total value for each reportable transaction.

## § 951.16 Annual reporting requirements.

By March 15 of each year after the effective date of this subpart, a nuclear supplier shall submit electronically a report to the Department signed by an official with authority to bind the company that certifies the following information with respect to each reportable transaction during the prior calendar year:

- (a) Description of the transaction;
- (b) Date of the transaction;
- (c) Location of the nuclear installation(s) involved in the transaction;
- (d) Identification of the volume or quantity of each item listed in appendix A or B of this part involved in the transaction; and
- (e) Value (expressed in U.S. dollars) of each identified item.

## § 951.17 Disclosure requirements.

Information received from a nuclear supplier by the Department may be available to the public subject to the provision of 5 U.S.C. 552, 18 U.S.C. 1905 and 10 CFR part 1004, provided that:

(a) Subject to the requirements of law, information such as trade secrets, commercial and financial information that a nuclear supplier may submit to the Department in writing shall not be disclosed in accordance with Department regulations concerning the public disclosure of information. Any nuclear supplier asserting that the information is privileged and confidential should appropriately identify and mark such information when submitting to the Department.

(b) Upon a showing satisfactory to the Department that any information or portion thereof obtained under this regulation would, if made public, divulge trade secrets or other proprietary information, the Department will not disclose such information.

## Appendix A to Part 951 - List of Primary Nuclear Items

The following are the primary nuclear items to be used in the calculation of the risk exposure of a nuclear supplier. The scope of this appendix includes services for the design, construction, operation, and decommissioning of the nuclear installations identified below, in addition to the supply of the identified components, systems and structures.

#### 1. Nuclear Plant Steam Supply Systems

- (a) Reactor pressure vessels, internals, and associated piping, pressure tubes and components, pressurizer, primary steam generators and coolant pumps or circulators.
- (b) Nuclear fuel.
- (c) On-line reactor fuel charging and discharging machines.
- (d) Reactor control rod system, drive mechanisms and rod position indication systems.
- (e) Detection, measurement and control equipment to determine neutron flux, temperature and pressure levels of nuclear steam supply systems.
- (f) Other components especially designed or prepared for use in a nuclear reactor.

#### 2. Nuclear Plant Safety Systems

- (a) Mechanical equipment (e.g., pumps, piping, automatic valves, tanks and heat exchangers).
- (b) Emergency electrical equipment including diesel generators, batteries, switchgear and motor control centers.

(c) Associated process monitoring and control equipment.

#### 3. Nuclear Plant Containment

Material and components used to prevent the release of radiation and contamination from the structures housing the nuclear reactor (e.g., in primary containment or confinement buildings).

## Appendix B to Part 951 - List of Secondary Nuclear Items

The following are secondary nuclear items to be used in the calculation of the risk exposure of a nuclear supplier. The scope of this appendix includes services for the design, construction, operation, and decommissioning of the nuclear installations identified below, in addition to the supply of the identified components, systems and structures.

#### 1. Nuclear Plants

- (a) Mechanical equipment including pumps, valves, heat exchangers, cranes, casks, compactors, demineralizers, filters, and tanks.
- (b) Electrical equipment including motors, switchgear and motor control centers and batteries.
- (c) Process monitoring, detection and control systems.
- (d) Structures used for nuclear fuel storage (e.g. spent fuel pool and storage racks; dry storage casks and facilities).

#### 2. Enrichment and Fuel Fabrication Facilities

- (a) Mechanical equipment including pumps, valves, heat exchangers, cranes, casks, compactors, demineralizers, filters, and tanks.
- (b) Electrical equipment including motors, switchgear and motor control centers and batteries.
- (c) Process monitoring, detection and control systems.
- (d) Gas centrifuges and assemblies and components.

- (e) Specially designed or prepared systems, equipment and components for use in various types (gaseous diffusion, centrifuge or laser, etc.) of enrichment plants.
- (f) Tanks, casks and structures specifically designed for the storage of nuclear materials.
- (g) Nuclear fuel materials (e.g., enriched uranium, plutonium, thorium or mixed oxide fuel).
- (h) Fabricated nuclear fuel components (e.g., fuel pellets, fuel pins, fuel assemblies).

#### 3. Irradiated Nuclear Fuel Reprocessing Facility

- (a) Mechanical equipment including pumps, valves, heat exchangers, cranes, casks, compactors, demineralizers, filters, and tanks.
- (b) Electrical equipment including motors, switchgear and motor control centers and batteries;
- (c) Process monitoring, detection and control systems.
- (d) Fuel chopping machines (tools intended to cut, chop or shear irradiated fuel).
- (e) Dissolvers/Chemical holding or storage tanks.
- (f) Solvent extractors/extraction equipment.
- (g) Plutonium nitrate to plutonium oxide conversion systems.
- (h) Plutonium metal production system.
- (i) Tanks, casks and structures specifically designed for the storage of irradiated and separated nuclear material.

#### 4. Nuclear Material Transportation

Casks or canisters especially designed for nuclear material transport.

#### 5. Nuclear Material Storage Facilities

Tanks, casks, and structures specifically designed for the storage of nuclear materials.

## Alternative 2 - Risk-Informed Assessment Formula by Nuclear Sector

## PART 951 – CONVENTION ON SUPPLEMENTARY COMPENSATION FOR NUCLEAR DAMAGE CONTINGENT COST ALLOCATION

#### **Subpart A – General Provisions**

#### Sec.

- 951.1 Purpose.
- 951.2 Scope.
- 951.3 Definitions.

#### Subpart B - Retrospective Risk Pooling Program

- 951.4 Role of the Department.
- 951.5 Nuclear supplier sectors.
- 951.6 Retrospective premium payment.
- 951.7 Risk share by sector.
- 951.8 Allocated risk by sector.
- 951.9 Allocated cost by sector.
- 951.10 Risk exposure of nuclear supplier in facility sector.
- 951.11 Risk exposure of nuclear supplier in equipment and technology sector.
- 951.12 Risk exposure of nuclear supplier in nuclear materials and nuclear materials transportation sector.
- 951.13 Risk exposure of nuclear supplier in nuclear services sector.
- 951.14 Aggregate risk exposure by sector.
- 951.15 Small nuclear supplier exclusion.
- 951.16 Retrospective premium payment cap.

## Subpart C - Payments to the United States

- 951.17 General rule.
- 951.18 Annual payments.
- 951.19 Vouchers.
- 951.20 Failure to pay.

#### Subpart D - Information Collection

- 951.21 Reporting requirements for prior transactions.
- 951.22 Annual reporting requirements.
- 951.23 Disclosure requirements.

Authority: 42 U.S.C. 2201, 42 U.S.C. 17373.

#### **Subpart A -- General Provisions**

§ 951.1 Purpose.

This part establishes the regulations for the implementation of section 934 (42 U.S.C. 17373) of the Energy Independence and Security Act of 2007 (Pub. L. 110-140), which provides for the proration of a retrospective premium among nuclear suppliers for the insurance against potential liability for nuclear damage provided by the adherence of the United States to the Convention.

#### § 951.2 Scope.

This part covers nuclear incidents that occur outside the United States that result in a request for funds and that are not a Price-Anderson incident.

#### § 951.3 Definitions.

For purposes of this part, words shall be defined as provided for in the Atomic Energy Act and in section 934 of the Act and as follows –

Act means the Energy Independence and Security Act of 2007 (Pub. L. 110-140).

Adjusted value means the value (expressed in U.S. dollars) received by a nuclear supplier for an item, adjusted to reflect inflation from the date of the covered transaction involving the item to the date of the nuclear incident for which the retrospective premium payment of the supplier is being calculated.

Contingent cost means the cost to the United States in the event of a covered incident the amount of which is equal to the amount of funds the United States is obligated to make available under paragraph 1(b) of Article III of the Convention.

Convention means the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997.

Covered incident means a nuclear incident the occurrence of which results in a request for funds under the Convention.

Covered installation means a nuclear installation at which the occurrence of a nuclear incident could result in a request for funds under the Convention.

Covered nuclear supplier means a nuclear supplier whose goods or services, if supplied in the United States, would be subject to the requirements of 10 CFR part 21.

#### Covered person means-

- (1) A United States person; or
- (2) An individual or entity (including an agency or instrumentality of a foreign country) that is located in the United States, or carries out an activity in the United States; but
- (3) Does not include the United States, or any agency or instrumentality of the United States.

Covered transaction means any reportable transaction by which a nuclear supplier is the final nuclear supplier of a covered installation, equipment and technology for a covered installation, nuclear materials and transportation of nuclear materials to or from a covered installation, and nuclear services to a covered installation.

Department means the United States Department of Energy.

Final nuclear supplier means the nuclear supplier that obtains, where required, an NRC general or specific license under 10 CFR part 110, Department of Commerce export license under 15

CFR part 734, or DOE authorization under 10 CFR part 810, for the export of the item(s) involved in a reportable transaction.

Lead nuclear supplier means 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].

Nuclear installation means:

- (1) Any nuclear reactor facility or plant other than one with which a means of sea or air transport is equipped for use as a source of power, whether for propulsion thereof or for any other purpose;
- (2) Any facility or plant using nuclear fuel for production of nuclear material, or any facility or plant for the processing of nuclear material, including any facility or plant for the reprocessing of irradiated nuclear fuel; and
- (3) Any facility or plant where nuclear material is stored, other than storage incidental to the carriage of such material; provided that the installation State may determine that several nuclear installations of one operator which are located at the same site shall be considered a single nuclear installation.

Nuclear material means nuclear fuel, other than natural or depleted uranium, capable of producing energy by a self-sustaining chain process of nuclear fission outside a nuclear reactor, either alone or in combination with some other material, and radioactive products or waste, where radioactive products or waste means any radioactive material produced in, or any material made radioactive by exposure to the radiation incidental to the production or utilization of

nuclear fuel, but does not include radioisotopes which have reached the final stage of fabrication so as to be usable for any scientific, medical, agricultural, commercial or industrial purpose.

Nuclear supplier means a covered person (or a successor in interest of a covered person) that -

- (1) Supplies facilities, equipment, fuel, services, or technology pertaining to the design, construction, operation, or decommissioning of a covered installation, or
  - (2) Transports nuclear materials that could result in a covered incident.

*Price-Anderson incident* means a covered incident for which section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) would make funds available to compensate for public liability (as defined in section 11 of that Act (42 U.S.C. 2014)).

Reportable transaction means any transaction by a covered nuclear supplier involving supply of the following items: a nuclear installation outside the United States between January 1, 1960 through 2007; equipment, components or technology for a nuclear installation outside the United States after 2007; nuclear materials to a nuclear installation outside the United States after 2007; the transportation outside the United States of nuclear material to or from a nuclear installation after 2007; and the supply of services to a nuclear installation outside the United States after 2007.

Request for funds means a request for funds pursuant to Article VII of the Convention.

Secretary means the Secretary of Energy.

United States means, when used in a geographic sense, the same as the definition of the term in section 11 of the Atomic Energy Act of 1954 and includes the Commonwealth of Puerto Rico,

any other territory or possession of the United States, and the waters of the United States territorial sea under Presidential Proclamation Number 5928, dated December 27, 1988 (43 U.S.C. 1331 note).

#### United States person means -

- (1) Any individual who is a resident, national, or citizen of the United States (other than an individual residing outside of the United States and employed by a person who is not a United States person); and
- (2) Any corporation, partnership, association, joint stock company, business trust, unincorporated organization, or sole proprietorship that is organized under the laws of the United States.

## Subpart B -- Retrospective Risk Pooling Program

## § 951.4 Role of the Department.

Within 60 calendar days of a request for funds, the Department shall calculate the retrospective premium payment for each nuclear supplier in accordance with the rules set forth in this subpart and notify each nuclear supplier through publication in the **Federal Register**.

## § 951.5 Nuclear supplier sectors.

The Department shall calculate the retrospective premium payment for each nuclear supplier based upon the nuclear supplier's covered transactions in the following sectors:

(a) Facility Sector, which consists of the suppliers that are the lead nuclear suppliers involved in the development and deployment of nuclear installations. (b) Equipment and Technology Sector, which consists of the suppliers of equipment, components or technology used in a nuclear installation.

(c) Nuclear Material and Nuclear Material Transportation Sector, which consists of the suppliers of nuclear materials to a nuclear installation, or the transport of nuclear materials to or from a nuclear installation.

(d) Services Sector, which consists of the suppliers of services to a nuclear installation for the design, construction, operation, or decommissioning of a nuclear installation.

## § 951.6 Retrospective premium payment.

The retrospective premium payment for a nuclear supplier shall be the sum of the product of the risk share of the nuclear supplier by sector and the allocated cost by sector in which the supplier engaged in covered transactions.

#### § 951.7 Risk share by sector.

The risk share of a nuclear supplier shall be the quotient of the risk exposure of the nuclear supplier by sector divided by the aggregate risk exposure of all nuclear suppliers in the sector.

#### § 951.8 Allocated risk by sector.

The allocation of risk among each of the nuclear sectors is as follows:

- (a) Facility sector: 50 percent.
- (b) Equipment and Technology sector: 25 percent.
- (c) Nuclear Materials and Nuclear Material Transportation sector: 15 percent.

(d) Services sector: 10 percent.

#### § 951.9 Allocated cost by sector.

The allocated cost for each sector shall be the product of the allocated risk of each sector and the contingent cost.

## § 951.10 Risk exposure of nuclear supplier in facility sector.

The risk exposure of a nuclear supplier in the facility sector shall be the sum of the following products:

- (a) The quantity of all covered transactions by the supplier of nuclear reactor facilities or plants or facilities or plants for the reprocessing of irradiated nuclear fuel multiplied by 2; and
- (b) The quantity of all covered transactions by the supplier of facilities or plants for the processing of nuclear material (excluding a nuclear reactor facility or plant or a facility or plant for the reprocessing of irradiated nuclear fuel), facilities or plants where nuclear material is stored (other than storage incidental to the carriage of such material), or nuclear materials transportation multiplied by 1.

## § 951.11 Risk exposure of nuclear supplier in equipment and technology sector.

The risk exposure of a nuclear supplier in the equipment and technology sector shall be the sum of the following products:

(a) The adjusted value of all covered transactions by the supplier of equipment, components or technology for nuclear reactor facilities or plants or facilities or plants for the reprocessing of irradiated nuclear fuel multiplied by 2; and

(b) The adjusted value of all covered transactions by the supplier of equipment, components, or technology for facilities or plants for the processing of nuclear material (excluding a nuclear reactor facility or plant or a facility or plant for the reprocessing of irradiated nuclear fuel), facilities or plants where nuclear material is stored (other than storage incidental to the carriage of such material), or nuclear material transportation multiplied by 1.

# § 951.12 Risk exposure of nuclear supplier in nuclear materials and nuclear materials transportation sector.

The risk exposure of a nuclear supplier in the nuclear materials and nuclear materials transportation sector shall be the sum of the following products:

- (a) The quantity in metric tonnage of all covered transactions by the supplier of nuclear materials or nuclear material transportation to nuclear reactor facilities or plants or facilities or plants for the reprocessing of irradiated nuclear fuel multiplied by 2; and
- (b) The quantity in metric tonnage of all covered transactions by the supplier of nuclear materials or nuclear material transportation to facilities or plants for the processing of nuclear material (excluding a nuclear reactor facility or plant or a facility or plant for the reprocessing of irradiated nuclear fuel), facilities or plants where nuclear material is stored (other than storage incidental to the carriage of such material), or nuclear material transportation multiplied by 1.

## § 951.13 Risk exposure of nuclear supplier in nuclear services sector.

The risk exposure of a nuclear supplier in the services sector shall be the sum of the following products:

- (a) The adjusted value of all covered transactions by the supplier of services to nuclear reactor facilities or plants or facilities or plants for the reprocessing of irradiated nuclear fuel multiplied by 2;
- (b) The adjusted value of all covered transactions by the supplier of services to facilities or plants for the processing of nuclear material (excluding a nuclear reactor facility or plant or a facility or plant for the reprocessing of irradiated nuclear fuel), facilities or plants where nuclear material is stored (other than storage incidental to the carriage of such material), and nuclear material transportation multiplied by 1.

#### § 951.14 Aggregate risk exposure by sector.

The aggregate risk exposure by sector is the sum of the risk exposures for all nuclear suppliers in that sector.

## § 951.15 Small nuclear supplier exclusion.

A nuclear supplier with a risk exposure of less than [amount, e.g., \$1,000,000, or some other amount for covered transactions within the equipment and technology and services sector, and insert amount, e.g., 1,000 MT of nuclear material or some other amount for covered transactions within the nuclear materials and nuclear materials transportation sector, or exclusion for a nuclear supplier that qualifies as a "small business" under Small Business Administration codes] shall not be assessed a retrospective premium payment and shall not be included in the aggregate risk exposure and calculation of retrospective premium payments for other nuclear suppliers.

## § 951.16 Retrospective premium payment cap.

- (a) The retrospective premium payment of a nuclear supplier shall not exceed [amount, e.g., 5%, 25%, or some other percentage; or a dollar amount, e.g., \$25,000,000, or some other dollar amount] of the contingent cost, except as provided in paragraph (c) of this section.
- (b) In the event the retrospective premium payments assessed from all nuclear suppliers subject to this subpart does not equal the contingent cost owed by the United States, the difference shall be assessed on a pro rata basis consistent with the process in this subpart against those nuclear suppliers that have not reached the cap on premium payments established under paragraph (a) of this section.
- (c) If the retrospective premium payments assessed from all nuclear suppliers pursuant to paragraphs (a) and (b) of this section does not equal the contingent cost owed by the United States, then the difference shall be assessed as an additional premium payment on a pro rata basis consistent with the process in this subpart against all nuclear suppliers in an amount necessary to cover the United States' contingent cost in full.

## Subpart C - Payments to the United States

#### § 951.17 General rule.

Except as provided in § 951.18, not later than 60 calendar days after receipt of a notification from the Department under § 951.4, a nuclear supplier shall pay to the general fund of the Treasury the retrospective premium payment calculated under subpart B.

## § 951.18 Annual payments.

A nuclear supplier may elect to prorate the retrospective premium payment calculated under subpart B in 5 equal annual payments (including interest on the unpaid balance at the prime rate

prevailing at the time the first payment is due, no later than 60 days after receipt of a notification from the Department under § 951.4).

#### § 951.19 Vouchers.

A nuclear supplier shall make payments required under this Part by submitting a letter, concurrent with payment to the general fund under § 951.17, signed by an official with authority to bind the company to the Secretary of the Treasury that certifies —

- (a) The amount paid is made pursuant to the Department's notification under § 951.4;
- (b) The amount is correctly computed; and
- (c) The specific payment plan, either a one-time payment or 5 equal annual payments (including interest on the unpaid balance at the prime rate prevailing at the time the first payment is due, no later than 60 days after receipt of a notification from the Department under § 951.4).

#### § 951.20 Failure to pay.

If a nuclear supplier fails to make a payment required under this Part, the Secretary shall take appropriate action to recover from the nuclear supplier –

- (a) The amount of the payment due from the nuclear supplier;
- (b) Any applicable interest on the payment; and
- (c) A penalty of not more than twice the amount of the payment due from the nuclear supplier.

#### Subpart D - Information Collection

## § 951.21 Reporting requirements for prior transactions.

Not later than six months after the effective date of this subpart, a nuclear supplier shall submit electronically a report to the Department signed by an official with authority to bind the company that certifies the following information with respect to each reportable transaction prior to the effective date of this subpart;

- (a) Description of the transaction;
- (b) Date of the transaction;
- (c) Location of nuclear installation(s) involved in the transaction;
- (d) Identification of the volume or quantity of each item involved in the transaction; and
- (e) Value (expressed in U.S. dollars) of each identified item, and the total value for each reportable transaction.

#### § 951.22 Annual reporting requirements.

By March 15 of each year after the effective date of this subpart, a nuclear supplier shall submit electronically a report to the Department signed by an official with authority to bind the company that certifies the following information with respect to each reportable transaction during the prior calendar year:

- (a) Description of the transaction;
- (b) Date of the transaction;
- (c) Location of the nuclear installation(s) involved in the transaction;
- (d) Identification of the quantity of each item involved in the transaction; and

(e) Value (expressed in U.S. dollars) of each identified item involved in the transaction.

#### § 951.23 Disclosure requirements.

Information received from a nuclear supplier by the Department may be available to the public subject to the provision of 5 U.S.C. 552, 18 U.S.C. 1905 and 10 CFR part 1004, provided that:

- (a) Subject to the requirements of law, information such as trade secrets, commercial and financial information that a nuclear supplier may submit to the Department in writing shall not be disclosed in accordance with Department regulations concerning the public disclosure of information. Any nuclear supplier asserting that the information is privileged and confidential should appropriately identify and mark such information when submitting the information to the Department.
- (b) Upon a showing satisfactory to the Department that any information or portion thereof obtained under this regulation would, if made public, divulge trade secrets or other proprietary information, the Department will not disclose such information.