

100 Fluor Daniel Drive Greenville, SC 29607-2770

Lansing G. Dusek Regulatory Affairs Director Fluor Nuclear Power 864-517-1386 Lansing.Dusek@fluor.com

April 16, 2015

U.S. Department of Energy Office of the General Counsel Mailstop GC-72, Section 934 Rulemaking 1000 Independence Avenue S.W. Washington, D.C. 20585

Attention: Ms. Sophia Angelini, Office of the General Counsel

Dear Ms. Angelini,

Subject: Comments on the Convention on Supplementary Compensation for Nuclear Damage Contingent Cost Allocation (Docket Number DOE-HQ-2014-0021 and Regulatory Information Number 1990-AA39)

Fluor Corporation (Fluor) appreciates the opportunity to comment on the Department of Energy's (DOE) notice of proposed rulemaking (NOPR) Convention on Supplementary Compensation (CSC) for Nuclear Damage Contingent Cost Allocation published December 17, 2014. Fluor acknowledges the considerable time and effort the Department has taken to prepare the NOPR and the ongoing difficulty of developing this regulation.

Fluor attended both DOE information sessions on this issue and participated in the formulation of comments as a member of both the Contractors International Group on Nuclear Liability (CIGNL) and the Nuclear Energy Institute (NEI). Fluor endorses many of the key issues presented in final comments from both CIGNL and NEI. Without a more complete understanding of the total number of covered nuclear suppliers subject to the regulation, the aggregate risk exposure, and each nuclear supplier's calculated risk exposure against the aggregate, it is simply impossible to reliably estimate a company's retrospective premium under either alternative presented in the NOPR. Consequently, it is difficult to recommend the percentage amount or specific dollar amount for a cap on the retrospective premium for any one company.

Fluor agrees with CIGNL and NEI that a supplemental notice of proposed rulemaking (SNOPR) and another round of comments are necessary. Fluor encourages DOE to propose in its SNOPR one risk-informed assessment formula to determine the obligation of nuclear suppliers participating in the risk pool (risk-assessment formula). The risk-assessment formula should consider the input DOE receives on the two alternatives outlined in the NOPR (as well as comments on alternative approaches) combined with any additional data DOE may obtain to further refine the formula.

While we endorse much of the content of both CIGNL and NEI comments, below are key issues Fluor believes should be included in a final regulation, but are not reflected in either the CIGNL or NEI comments.

## Inclusion of the Period 1960-2007 in the Final Risk-Assessment Formula

In the NOPR, DOE presented two alternatives that each require U.S. nuclear suppliers to report export transactions in the 1960-2007 period to inform a risk assessment model used to determine a company's retrospective premium payment. DOE justified this approach with the following statement:

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.

Fluor agrees with this principle and recommends DOE include the 1960-2007 period in its final risk-assessment formula. We have attached an example scenario to further explain why the 1960-2007 period should be included (Attachment). This scenario highlights how a nuclear supplier's previous work at a covered nuclear installation contributed to a nuclear incident in 2015, but that supplier would escape all liability and not pay any CSC retrospective premium payment.

During the comment formulation process, many companies with significant past transactions at covered nuclear installations argued that complete data going back to 1960 is simply not available, or retrievable. Although it is unlikely that any company has complete records documenting all transactions going back to 1960 in a format that can be submitted to DOE, this level of completeness would not be necessary in order to include this period in a risk-assessment formula.

With some modification, the general approach DOE has outlined in NOPR Alternative 2 for identifying and assigning risk to the "facility sector" could be utilized (79 Fed.Reg. 75085, December 17, 2014). DOE could streamline this approach and simply require each lead nuclear supplier to certify whether their aggregate reportable transaction exceeds \$500 million in revenues over this period. The contingent costs assigned to this group could be allocated equally within this group (without the requirement for further financial data) or allocated based on the likelihood their goods or service would contribute to a nuclear incident.

There are other formulas that DOE could develop that would not require complete financial data going back to 1960. With respect to the total risk allocation assigned to the 1960-2007 period, in its second alternative DOE proposed 50% of the contingent costs to be assigned to the "facility sector." We believe the risk allocated to this group should be in the range of 30-50%.

## **Retrospective Premium Payment Cap**

Fluor agrees there should be a retrospective premium payment cap to ensure a disproportionate share of the contingent costs are not assigned to any one company. However, when a cap is applied and the incremental premium above the cap is reallocated to the other nuclear suppliers, it should not result in a disproportionate share borne by any one company receiving that additional premium. To protect against this potential inequity, we recommend that the total premium payment of any one company should not exceed 200% of its original pro rata share or the cap amount, whichever is lower. Any remaining premium should be reallocated back to the companies that initially received the cap.

As an example, consider a scenario when there are ten covered nuclear suppliers, a call for a \$70 million contingent cost, and a \$10 million cap in effect (with a 200% limit for companies below the cap). Before the cap is applied, the pro rata distribution of the \$70 million contingent cost is assigned to Companies A and B each with \$23.5 million; Companies C, D, and E each with \$6 million; and Companies F, G, H, I, and J each with \$1 million. When the \$10 million cap is applied to Companies A and B, the \$27 million in incremental premium above the cap would be reallocated to each company below the cap. As a result, the total premiums for Companies C, D, and E rise by \$4 million to \$10 million each, and premiums for Companies F-J increase by \$1 million to \$2 million each. The remaining unallocated premium of \$10 million is reallocated back to Companies A and B for a total final premium of \$15 million each.

This method is dynamic and, as a result, more equitable than a strict "not to exceed" \$10 million cap. Companies A and B receive a substantial discount in retrospective premium from their original pro rata share, and those companies below the cap are protected from a disproportionate increase in premium. Without the 200% limit for the smaller suppliers, this same scenario would have resulted in a disproportionate payment of \$4 million or 400% increase for Companies F-J.

## **Risk Allocation for Decommissioning Activities**

When assigning a risk allocation to sectors or categories of nuclear supplier work at covered nuclear installations, the final rule should recognize the low degree of risk for certain decommissioning activities. Decommissioning work at nuclear installations such as power reactors that have had all fuel elements removed permanently from the reactor core is unlikely to result in a nuclear incident triggering a call for CSC funds. Thus, these activities should be in a lower risk category for determining the retrospective premium. We endorse the general comments of both CIGNL and NEI on this issue.

Fluor appreciates your consideration of these comments and the opportunity to participate in this rulemaking on the CSC for Nuclear Damage Contingent Cost Allocation. We urge DOE to fully consider our comments, as well as those comments from CIGNL and NEI. We are available to discuss our comments directly with you, and we hope there will be another opportunity to offer further comments following a SNOPR in the near future.

Should you have any questions pertaining to this letter, please contact me or Dwight Cates, Director, Government Relations, at (202) 548-5800 or Dwight.Cates@fluor.com.

Sincerely,

Lansing G. Dusek

Attachment

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## The Problem with Eliminating the 1960-2007 Period

In the following scenario, DOE has implemented a CSC rulemaking that eliminates the 1960-2007 period from consideration in a risk assessment model for retrospective risk pooling. This scenario demonstrates the inequity of this approach, and the result is an unreasonable shift of risk onto nuclear suppliers with more recent transactions.

Northhouse Nuclear Power (NNP), a U.S. company, completed design of a reactor in 1979 – it sold the identical reactor to China and Japan. NNP licensed the use of its technology and hardware for a reactor at each of these two sites and did not supply or service the reactors in the years following the completed construction of these plants. NNP closed out its international nuclear business in 2007, and focused only on domestic nuclear work. Due to a flaw in the NNP design sold in China and Japan, in 2016 both NNP reactors incurred a nuclear event with significant off site release of radioactive material.

The nuclear incident in China led to a five year lawsuit against NNP for its flawed reactor design. NNP defended against the litigation and eventually entered into a \$1 billion settlement from NNP and other suppliers to that reactor.

The event in Japan led to a full CSC call for the U.S. Contingent Cost payment of \$70 million that was allocated against all covered U.S. nuclear suppliers in 2016. NNP received a \$0 allocation of the \$70 million contingent cost because all of its work at the Japan reactor occurred prior to 2008 and it had not supplied that reactor or any other international nuclear installation located in a CSC country post-2007.