

September 29, 2014

**DECLARATION OF MARK COOPER  
IN SUPPORT OF MOTIONS TO REOPEN THE RECORD  
OF NRC REACTOR LICENSING AND RE-LICENSING PROCEEDINGS**

Under penalty of perjury, I, Mark Cooper, declare as follows:

1. My name is Mark Cooper. I am a Senior Fellow for Economic Analysis at the Institute for Energy and the Environment at Vermont Law School. I am an expert in the field of economic and policy analysis with a focus on energy, technology, and communications issues.
2. On December 16, 2013, I prepared a declaration in this proceeding, which is attached and incorporated herein by reference. A copy of my curriculum vitae is attached to that declaration.
3. The purpose of my December 16, 2013 declaration was to evaluate whether the costs of nuclear waste management, including onsite spent nuclear reactor fuel storage and permanent disposal, are high enough to significantly affect the outcome of an analysis that compares the costs and benefits of nuclear reactors with other electricity sources.
4. The economic analysis I presented in my declaration continues to be valid and to represent my professional opinion on the matter. My analysis shows that the costs of managing spent nuclear fuel are likely to be quite large in absolute value, running to hundreds of billions of dollars (in constant 2012 dollars). They are in the range of \$10 to \$20 per MWH (\$0.01 to \$0.02 per kWh). These costs could be high enough to materially affect energy choices when the costs of new reactors or extension of the operating life of existing reactors are compared with energy efficiency and alternative energy sources.
5. Therefore, in my professional opinion, if the NRC were to include the costs of spent fuel storage and disposal in its cost-benefit analyses for reactor licensing and re-licensing decisions, these costs easily could tip the balance of the analysis away from licensing or re-licensing the reactors and in favor of other alternatives or the no-action alternative.

I declare that the foregoing statements of fact are true and correct to the best of my knowledge and that the statements of opinion expressed above are based on my best professional judgment.



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Mark Cooper

Date: September 29, 2014