NUCLEAR ENERGY INSTITUTE

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Karl S. Michael
New York State Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

Dear Mr. Michael:

On behalf of the Nuclear Energy Institute[i] (NEI), I appreciate the opportunity to comment on the modeling being undertaken to support the Regional Greenhouse Gas Initiative (RGGI). NEI is working closely with the owners of all the nuclear power plants in the 11 states involved in or observing the RGGI process.

Modeling the electric sector to determine how different scenarios will impact greenhouse gas (GHG) emissions, criteria pollutant emissions, electricity prices, and the macroeconomic effect on the region is critical to designing a workable, responsible GHG reduction program that will achieve the region's goals at the lowest possible cost.

Modeling results, however, are only as good as the assumptions used as inputs. Reasonable assumptions are critical, especially for the reference case – the expected business-as-usual scenario against which all potential GHG reduction scenarios will be compared.

We strongly suggest that the RGGI modeling team include the following two assumptions regarding nuclear energy in the reference case:

1. All nuclear power plants that have not already received a 20 year license renewal of their original 40 year licenses will apply for and receive license renewal;

[i] [i]NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including regulatory aspects of generic operational and technical issues. NEI members include all companies licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

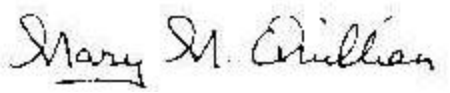
2. Potential power uprates at existing nuclear facilities be included in the list of new capacity options from which the model selects, based on economics, when new generating capacity is needed.

We also strongly recommend that RGGI model one future scenario to investigate the outcome if nuclear power plants do not renew their licenses. In this scenario, all nuclear plants would shut down at the end of their current license term and no additional license renewals occur. In this scenario, the decommissioning date should also be a factor in the model's choice of which nuclear plants perform uprates. For example, a plant that will shut down in the next 10 years may not receive a power uprate because the return-on-investment period is so short.

Finally, RGGI's modeling assumptions may include overnight capital costs for new nuclear generating capacity. For lack of any other source, many analysts simply accept the capital cost assumptions contained in the Energy Information Administration's (EIA) *Annual Energy Outlook (AEO)*. AEO 2004 assumed an overnight capital cost of slightly more than $1,900 per kilowatt. NEI considers this assumption excessively high. The industry estimates that new nuclear plants can be built for $1,000 – 1,200 per kilowatt for Nth-of-a-kind overnight capital cost. The first couple of units may be slightly higher. This issue of nuclear capital costs is complex, and NEI would be happy to supply RGGI more information on the future capital costs of new nuclear power plants.

We are also available to answer questions or provide further information regarding nuclear energy and nuclear power plant costs and performance. Please contact me at mmq@nei.org, or 202-739-8013.

Sincerely,



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