UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

COMMISSIONER

July 22, 2014

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Whitfield:

Thank you for the opportunity to appear before the Subcommittee on Energy and Power at the May 7, 2014, hearing entitled "The NRC FY 2015 Budget and Policy Issues." By letter dated May 29, 2014, you provided additional questions for the record related to this hearing; my responses to these questions are enclosed.

Please do not hesitate to contact me should you or the members of your subcommittees have any additional questions.

Sincerely,

[redacted]

William D. Magwood, IV

cc: The Hon. Bobby L. Rush
Ranking Member, Subcommittee on Energy and Power

Enclosure

Additional Questions for the Record for Commissioner Magwood

The Honorable John Shimkus

1. **The NRC has entered into a multi-year study on radiation impacts around nuclear power plants using National Academy of Sciences. In response to questions from the December 12, 2013, hearing, the Commission indicated "NRC staff realizes off-site radiation doses are unlikely to be addressed by this study." The Commission also indicated that one million dollars was spent on just the first phase of this National Academies study which: "confirmed the [NRC] staff position that, at the low offsite doses from these facilities, researchers would not expect to observe any increased cancer risks in the population surrounding these facilities attributed to the regulated release of radioactive effluents." The study itself confirmed that it will not advance understanding of radiation risk. Please explain why it is prudent for the NRC to spend upwards of another $1.5 million to reconfirm what the staff and other studies already demonstrated.**

ANSWER.

The agency made a determination that it is prudent to continue the Analysis of Cancer Risks Pilot Studies. Members of the public often express questions and concerns about health effects from living near nuclear facilities. To help address these public concerns, the staff uses the 1990 National Cancer Institute (NCI) report when addressing questions on cancer mortality in populations near nuclear power facilities. The staff relies on independent, credible health studies—including the 1990 NCI report—to augment its discussions about the NRC's robust regulatory programs to keep offsite doses as low as is reasonably achievable (ALARA) and to provide public health information that directly applies to the health outcomes that are often of concern (i.e., cancer). However, because the 1990 NCI report is now more than 20 years old, the NRC staff believes that more modern analysis methods, combined with up-to-date information sources, are needed to provide contemporary cancer information for current populations living near NRC-licensed nuclear facilities. While I share many of the concerns you raise, it is my expectation that the Commission will be able to monitor this activity as it progresses and take steps to assure that the agency's resources are appropriately utilized.

a. Shouldn't NRC focus on the uncertainties the staff said are NOT addressed by these studies, to truly advance scientific and public understanding of radiation health effects?

ANSWER.

a) The NRC focuses on many areas of radiation protection. While the NRC is not, itself, well-positioned to conduct the kind of scientific research you suggest, the agency funds, monitors, and actively participates in national and international research in radiation health effects to ensure the agency's system of radiation protection continues to adequately protect public health and safety. For example, the NRC supports the U.S. Department of Energy's Low-Dose Radiation Research program, which leverages multiple agency resources to analyze the cancer risks of nuclear power plant and industrial radiographer workers. These studies aim to quantify the cancer risks of workers with high career radiation doses when received slowly over an entire work-life. Scientific research of this nature is essential and should be pursued vigorously. As results become available, it is my view that NRC and other regulatory agencies should incorporate new knowledge into their policies.

b. Are operating reactor licenses ultimately required to pay for these studies?

ANSWER.

b) Yes. The NRC-commissioned study currently underway at the NAS is funded through NRC's fee-recovered funds.

The Honorable Lee Terry

1. **You testified that you would be interested in potential legislative approaches to make fees more moderate. Please provide any suggestions you may have.**

ANSWER.

During the hearing, I testified that I am open to potential legislative approaches to make our fee structure more modern. Though our fee rule is regularly updated, the basic structure has been

unchanged for decades. While I am not committed to any one solution, I am open to considering changes that will update our fee structure and ensure that it reflects the current reality of our work and regulatory structure. It is my understanding that the NRC staff is currently in the early planning stages of a study that will examine the issue. The staff's study is expected to include consideration of internal adjustments to our fee structure, which would not require legislative changes, as well as examining the fee structures of other fee-funded agencies, which may require legislative changes. I look forward to learning the results of the staff's work, and in the meantime am open to suggestions from other sources of potential changes to modernize our fee structure.