

January 15, 2010

MEMORANDUM TO: R. W. Borchardt  
Executive Director for Operations

FROM: Michael R. Johnson, Director */RA/*  
Office of New Reactors

SUBJECT: CONSIDERATION OF CERTAIN ENVIRONMENTAL IMPACTS  
RELEVANT TO GREENHOUSE GAS EMISSIONS

In CLI-09-21, "Memorandum and Order," the Commission provided forward-looking guidance to the staff regarding consideration of carbon dioxide and other greenhouse gas (GHG) emissions in environmental reviews for major U.S. Nuclear Regulatory Commission (NRC) licensing actions under the National Environmental Policy Act (NEPA). For new reactor applications, the guidance directs the staff to consider the effects of GHG emissions from the uranium fuel cycle, as well as from the construction and operation of facilities. CLI-09-21 also directs the staff to ensure that GHG emission issues are addressed consistently across the agency and, as appropriate, update the regulatory guidance to outline the consideration of GHG emissions. This memorandum reports on staff actions to comply with the Commission guidance.

In providing the guidance to the staff, the Commission recognized that the staff considered GHG emissions in a draft supplemental environmental impact statement (EIS) for the North Anna Power Station Unit 3. It should be noted that in addition to new reactor licensing reviews, the effects of GHG emissions is also being considered in EISs for materials and operating reactors licensing reviews. The program offices that have major licensing actions (primarily the Office of New Reactors, the Office of Nuclear Reactor Regulation, the Office of Nuclear Material Safety and Safeguards, and the Office of Federal and State Materials and Environmental Management Programs) and the Office of the General Counsel coordinate to ensure that environmental review practices remain aligned. The offices have initiated an effort to collaborate on agencywide guidance for consideration of GHG emissions.

After gaining experience on the initial set of pending combined license (COL) reviews and other agency licensing actions, the staff will update the regulatory guidance contained in its environmental standard review plans (i.e., NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants," and NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs") and in other guidance documents as appropriate.

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The staff's efforts will be informed by the work of other key stakeholders such as Federal agencies charged with the responsibility to assess and report on the science of climate change, the Council on Environmental Quality, and the practices of other Federal agencies. For example, the staff has reviewed the U.S. Global Change Research Program report, June 2009, "Global Climate Change Impacts in the United States" (<http://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf>). The staff is already using insights from the report to provide the context for the discussion of GHG emissions in upcoming draft EISs for COL reviews.

Additionally, the staff recognizes that the issue of GHG emissions will continue to gain additional attention with the evolution of public policy and science. The staff will remain vigilant for and be informed by insights from all stakeholders.

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