September 14, 2007

Robert P. Burke
P.O. Box 42
Rye Beach, NH 03871

Dear Mr. Burke:

I am responding to your letter of July 24, 2007, to the Secretary of the Nuclear Regulatory Commission regarding the Seabrook Nuclear Plant in New Hampshire. In that letter, you raised concerns regarding the "underworld" and stated that plants, such as Seabrook Station, should not be operated by computers and that the NRC is not paying attention to technology.

To respond to your concerns, it would be best if I described the safety and control systems at nuclear plants such as Seabrook, then discuss the actions the agency is taking to address the issue of cyber security. The current fleet of nuclear plants in the United States were designed in the 1960s and 1970s before computers were as highly reliable, capable and inexpensive as they are today. Current reactor safety and control systems are based on analog (relay) technology; plant computers typically only provide instrumentation information, alarms and recording capabilities.

However, instrumentation and controls for individual replacement plant components are now typically based on digital technology. Moreover, there is currently substantial interest in new reactor construction in the United States. These new reactor designs will rely heavily on computer technology since relay-based control systems have become obsolete. These changes have prompted the NRC to focus substantial attention on the safety of digital controls as well as cyber security in recent years.

Attached are three documents for your information that discuss cyber security and digital controls: 1) A "Backgrounder" on Nuclear Security; 2) a webpage on cyber security in digital instrumentation and controls, and 3) announcement of a forthcoming meeting of the digital instrumentation and controls cyber security task working group. I urge you to review these documents, as well as other similar sources, on the NRC website at www.nrc.gov to learn the extent of the NRC's research and regulatory efforts in this important new safety arena.

I trust this information answered your questions and concerns.

Sincerely,

/RA/

Samuel J. Collins
Regional Administrator

Enclosures: As Stated

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/RA/
Samuel J. Collins
Regional Administrator

Enclosures: As Stated

SUNSI Review Complete: _____rsb_____ (Reviewer's Initials)

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Letter to Robert P. Burke from Samuel J. Collins dated

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