

*New NRC Rules and Regulatory Guidance for Cyber Security
and the Implications for Meteorological Programs*
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The NRC is issuing 10 CFR 73.54 draft Regulatory Guide (DG-5022) to provide new rules and guidance for the cyber security of nuclear power plants. The licensees and applicants will be required to protect:

- safety-related and important-to-safety systems and networks,
- security systems and networks,
- emergency preparedness systems and networks including offsite communications,
- interfacing systems and networks which, if compromised, may adversely impact the above systems and networks.

The licensees and applicants will be required protect these systems and networks from cyber attacks that have the potential to:

- modify, destroy, or compromise the integrity or confidentiality of data and/or software;
- deny access to systems, services, and/or data
- impact the operation of systems, networks, and associated equipment.

To implement an effective cyber security program the licensees and applicants will be required to:

- implement security controls to protect systems and networks from cyber attacks
- apply state-of-the-art defense-in-depth protective strategies to ensure the capability to detect and respond to cyber attacks in a timely manner
- prevent adverse impacts from a cyber attack
- ensure that the functions or tasks required to be performed by the systems and networks are maintained and carried out as intended

Meteorological and other emergency response systems will be covered by the new rule and regulatory guide. This will add significant new requirements for cyber security for systems and networks for which cyber security has not been a big issue in the past. This talk will review the new cyber security requirements in 10 CFR 73.54 and DG-5022 and discuss the implications for the design, installation, operation, and maintenance of meteorological instrumentation, software, computers, systems, and networks.