Carnegie Mellon

Department of Engineering and Public Policy

Carnegie Mellon University Pittsburgh, PA 15213-3890 Telephone: 412-268-2670 Fax: 412-268-3757

July 10, 2002

Senator Joseph Lieberman Chairman, Senate Government Affairs Committee 340 Dirksen Senate Office Building Washington, D.C. 20510

Dear Senator Lieberman,

The Carnegie Mellon Electricity Industry Center (CEIC) is a multi-disciplinary research group dedicated to making the electricity industry more competitive and advancing new methods of electricity generation, distribution, and use. See www.cmu.edu/electricity for more information.

CEIC faculty have studied ways to improve the reliability and security of the electricity power system and developed policy recommendations listed below. As described in the attached article, the size and nature of the electricity infrastructure makes traditional approaches to security inadequate. Instead the nation should aim for a more survivable (or resilient) electric power system that can fulfill its mission in a timely manner, despite attacks, failures, or accidents that disable part of the system. Achieving resiliency will require resolving the current confusion and uncertainty in electricity industry restructuring. Simply 'hardening' the existing system is unlikely to efficiently improve the nation's security.

Legislation to promote a secure and survivable electricity infrastructure should have several features.

- 1. Ensure that effective inter-agency collaboration occurs among federal, state, and local governments. This would help the nation develop and deploy successful strategies most rapidly, and identify if and how authority should be consolidated.
- 2. Do not allow 'security' to become a pretext for delaying the introduction of competition into the electricity industry. At the same time, the sharing of sensitive private information for security reasons must not place firms at a potential competitive disadvantage.
- 3. Encourage the development and deployment of 'dual-use' technologies that achieve other goals as well as security goals.
- 4. Support the scientific and engineering research to improve our ability to design and operate a secure and survivable electric power system. This will require unprecedented integration of technical, economic, institutional, and behavioral research.

Thank you for your attention. The CEIC faculty would be willing to work with the Congress and the Administration on ways to improve the security of the electric power system.

Sincerely Yours,

M. Granger Morgan Lord Professor of Engineering and Public Policy Lester B. Lave Higgins Professor of Economics Alexander E. Farrell Research Engineer and Executive Director, CEIC