

New TCIPG Research Program Builds on Past Successes with Nearly \$18.8 Million DOE Award

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A new award of nearly \$18.8 million over a five-year period from the Department of Energy (DOE) and contributions from the Department of Homeland Security (DHS) will fund the new Trustworthy Cyber Infrastructure for the Power Grid (TCIPG) project, an expanded effort of the current project TCIP. The new TCIPG research program will develop and integrate information technologies with properties—such as real-time availability, integrity, authentication, and confidentiality—that are key to a modern, reliable, and efficient electric power grid.

Formerly funded primarily by the National Science Foundation, the original TCIP project was formed in fall 2005 with support from DOE and DHS. In its first three years, the project developed a range of hardware and software solutions, including a highly efficient technique for protecting message exchanges in existing, already-deployed power systems and a strategy for managing complex security policies in large networks that may have thousands of rules controlling who can access what, according to a press release.

The new TCIPG research program will build upon the successes of the TCIP program to develop technologies for a secure, real-time communication system; an automated cyber attack response system; risk assessment; security validation; and smart grid applications including wide-area control and monitoring, controllable load demand response, and plug-in hybrid electric vehicles.

The TCIPG team consists of professors, researchers, and students from the University of Illinois, Dartmouth College, University of California at Davis, and Washington State University. The program will be led by director William H. Sanders, principal scientist Himanshu Khurana, and the industry liaison, Pete Sauer.

More information about TCIP can be found on the ieRoadmap (interactive energy Roadmap) at: <http://www.controlsroadmap.net/viewproject.aspx?projid=35&typeid=1&parentid=2>

Information about TCIPG can be found in the press release from the University of Illinois Information Trust Institute: <http://www.iti.illinois.edu/news/press-releases/us-departments-energy-and-homeland-security-establish-major-resilient-smart-grid>