Transmission For Local, Distributed Electric Generators Much Cheaper Than Conventional Transmission Development, Finds New Minnesota Utility Study.

A new study released on September 15th by the Minnesota Department of Commerce contains very good news for those who want to develop renewable energy resources in a way that maximizes the economic benefits to Minnesota, and that keeps electric bills as low as possible.

The study was ordered by the Minnesota legislature in 2007 as part of an effort to encourage more locally owned wind energy projects.

The newly released Phase II report (which can be found at www.nawo.org and at www.energy.mn.gov) confirms and reinforces the findings of the Phase I study made public in June 2008:

- The existing transmission system can accommodate a great deal (over 650 megawatts {MW}) of new, strategically sized and located electrical generation capacity; and more importantly,

- To get the same amount of new renewable energy to consumers, it is vastly cheaper to strategically enhance the existing system in a dispersed and incremental fashion than it is to build the new big conventional powerlines needed by large, remote wind farms.
Taken together, the studies found that 1,200 MW of projects between 10 and 40 MW each could be added to the system for a cost of about **$100,000 per MW** in new transmission infrastructure costs. For comparison, the transmission costs for new generation capacity that will use the Brookings Line, a big conventional powerline needed primarily by large remote wind farms, is about **$930,000 per MW**.

“The findings confirm that it is cheaper to expand renewable energy by interconnecting many smaller scale projects rather than building extra-high voltage transmission lines to interconnect a relatively few very large scale projects,” says George Crocker of the North American Water Office, one of the groups that had lobbied for the studies. “And smaller scale projects enable local ownership, which generates far more economic benefits to Minnesota than large scale wind energy projects usually owned by large, absentee multinational corporations.”

Crocker argues that the studies, if used by state policy makers, could have a major impact. “For the first time, Minnesota agencies, regulators and utility managers have developed and used a rigorous analytical method to compare the cost of conventional central-station transmission development with that of transmission that encourages distributed, community-based electrical generation power plants. If state officials use this method in the future to determine the proper set of new powerlines, in terms of size, location, and timing, it could not only spur hundreds of locally owned energy projects but could save the state's electricity consumers billions of dollars by avoiding unnecessary new transmission lines.