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MINNESOTA WIND AND SOLAR RESOURCES CAN SUPPLY 100% OF STATE'S ELECTRICITY;
GROUNDBREAKING STUDY SHOWS IT CAN BE DONE RELIABLY AND ECONOMICALLY

St. Paul, MN – All of Minnesota's electricity generation needs can be met by wind and solar sources combined with improvements to the state's electric grid system and energy efficiency policies, according to a report released today. "Renewable Minnesota: A technical and economic analysis of a 100% renewable-energy based electricity system for Minnesota" was researched and written by Dr. Arjun Makhijani and Christina Mills of the Institute for Energy and Environmental Research (IEER) in Takoma Park, Maryland and Dr. M.V. Ramana of Princeton University.

Minnesota's electricity sector currently accounts for over one third of the state's greenhouse gas emissions. State policy is to reduce emissions by 80% by 2050. "A significant change in electricity generation sources is clearly needed to achieve that goal," Dr. Makhijani explained. "Fortunately, wind and solar can provide 100% of Minnesota's electricity. These currently available technologies also offer significant job creation and economic development opportunities."

"Renewable Minnesota" demonstrates that:

- Minnesota has more than enough wind and solar resources to meet the state's demand for electricity generation.
- A renewable energy-based electricity sector is technically feasible using proven technologies.
- A renewable energy-based electricity system costs about the same overall as at present if efficiency improvements are made along with the transition to renewable electricity generation.

"We have identified a number of steps that can help position Minnesota to utilize its available renewable energy resources. These actions will achieve a significant reduction in greenhouse gas emissions," Dr. Makhijani continued. "Transitioning to a renewable energy-based electricity sector will require creation of a more informed technical and cost framework."

Among the new report's recommendations:

- Initiate a statewide energy efficiency study, including technical and economic aspects. Examine the effect of efficiency investments on electricity demand.
- Require utilities to include increased renewable energy and storage in their Integrated Resource Plans

- Develop and implement a timeline for achieving a 100% renewable energy standard. Include achievable benchmarks and milestones.

Dr. Makhijani holds a Ph.D. in engineering from the University of California at Berkeley. He is a recognized authority on energy issues. Recently, he authored [Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy](#). He also served as a consultant on energy issues to the Tennessee Valley Authority, the Edison Electric Institute, the Lawrence Berkeley National Laboratory, and several agencies of the United Nations.