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October 13, 2021

PRESS RELEASE

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Extreme Climate Disasters Are Here to Stay – Can We Keep the Power On?

Climate change is here. In Iowa we have witnessed more frequent and intense heavy precipitation, floods, droughts, and extreme heat, all of which create conditions that threaten the reliability of Iowa's electric grid. The **Iowa Climate Statement 2021: Strengthening Iowa's Electric Infrastructure** released today advocates for new investments in our electric systems to make them more reliable and resilient to extreme weather events.

Last year's powerful August derecho, the most destructive thunderstorm in US history knocked out power to more than 500,000 Iowa households for as much as two weeks. "The loss of power left people in the dark without air conditioning, refrigeration, access to food, phone chargers and life sustaining medical equipment," said **Dave Courard-Hauri**, Chair of Environmental Science and Sustainability Program, Drake University. "This was a potentially deadly combination for many vulnerable and low-income Iowans."

"Iowa's power outages from the 2020 derecho resulted from extreme damage to transmission and distributions systems," said **Jim McCalley**, Anson Marston Distinguished Professor, Department of Electrical and Computer Engineering, Iowa State University. "Looking forward, smart investments are needed to harden transmission through improved pole and tower structural strength also hardening distribution by undergrounding can build resilience and reliability to withstand extreme wind and heavy ice loading."

"Adding transmission capacity in Iowa will support expansion of utility-scale wind and solar projects needed to address our carbon reduction efforts and prepare for the expected growth in electric vehicles." "Having more transmission capacity also enhances grid redundancy and will help avoid power generation outages." continued McCalley.

"As the country considers infrastructure investments to rebuild our economy, resources directed to electric grid improvements and utility scale renewable energy projects will prepare us for the climate change challenges we are experiencing right now," said **Gene Takle**, Emeritus Professor of Agronomy, Iowa State University. "These investments now will better prepare us for the coming decades when extreme weather events will become costlier, more common and more severe," said Takle.

“To prepare for future Iowa extreme weather events, we recommend that industry, policy makers and stakeholders identify ways to strengthen Iowa’s electric infrastructure, protect vulnerable people, and consider enhanced risks from climate change while managing costs,” said **Jerry Schnoor**, Co-director, UI Center for Global and Regional Environmental Research.

“Climate change is powerfully upon us. Climate action creates jobs, pristine air quality, better health, and a stable system for future generations,” said Schnoor.

The eleventh annual **Iowa Climate Statement 2021: Strengthening Iowa’s Electric Infrastructure** was endorsed by 223 Iowa science faculty and researchers from 34 Iowa colleges and universities.

The UI Center for Global and Regional Environmental Research has coordinated the release of annual climate statements since 2012. These statements, vetted by Iowa’s top experts, place pivotal climate change research into an Iowa-specific context, encouraging preparedness and resilience in the face of a climate crisis.

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The lead authors of the 2021 statement include: **David Courard-Hauri**, Chair of Environmental Science and Sustainability, Drake University, **James McCalley**, Anson Marston Distinguished Professor, London Chaired Professor of Power Systems Engineering, Department of Electrical and Computer Engineering, Iowa State University; **Jerry Schnoor**, Co-director, UI Center for Global and Regional Environmental Research and **Gene Takle**, Emeritus Professor of Agronomy, Iowa State University.

Also contributing to the statement, **Bill Gutowski**, Professor of Meteorology Department of Geological and Atmospheric Sciences, Iowa State University; **David Osterberg**, Emeritus Professor, College of Public Health, University of Iowa; **Ulrike Passe**, Associate Professor of Architecture, Director Center for Building Energy Research, Iowa State University; **Dave Swenson**, Research Scientist III, Iowa State University; **Eric Tate**, Associate Professor of Geographical and Sustainability Sciences, University of Iowa and **Peter S. Thorne**, Professor and Head, Occupational & Environmental Health, Associate Director, Environmental Health Sciences Research Center College of Public Health, University of Iowa.

The 34 colleges and universities of statement endorsers:

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Endorser affiliations are for identification purposes only and do not reflect views of their academic institutions.

The previous statements are available at www.iowaenvironmentalfocus.org