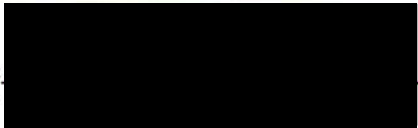


**Committee on Energy and Commerce**  
**U.S. House of Representatives**  
 Witness Disclosure Requirement - "Truth in Testimony"  
 Required by House Rule XI, Clause 2(g)

1. Your Name: <i>Steve Clemmer</i>		
2. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	<input checked="" type="radio"/> No
3. Are you testifying on behalf of an entity that is not a government entity?	<input checked="" type="radio"/> Yes	No
4. Other than yourself, please list which entity or entities you are representing: <i>Union of Concerned Scientists</i>		
5. Please list any Federal grants or contracts (including subgrants or subcontracts) that you or the entity you represent have received on or after October 1, 2012: <i>none</i>		
6. If your answer to the question in item 3 in this form is "yes," please describe your position or representational capacity with the entity or entities you are representing: <i>Director of Energy Research &amp; Analysis</i>		
7. If your answer to the question in item 3 is "yes," do any of the entities disclosed in item 4 have parent organizations, subsidiaries, or partnerships that you are not representing in your testimony?	Yes	<input checked="" type="radio"/> No
8. If the answer to the question in item 3 is "yes," please list any Federal grants or contracts (including subgrants or subcontracts) that were received by the entities listed under the question in item 4 on or after October 1, 2012, that exceed 10 percent of the revenue of the entities in the year received, including the source and amount of each grant or contract to be listed: <i>none</i>		
9. Please attach your curriculum vitae to your completed disclosure form.		

Signature: 

Date: *7/21/14*

# Steven L. Clemmer



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## PROFESSIONAL EXPERIENCE

**Director of Energy Research and Analysis**, Climate and Energy Program, Union of Concerned Scientists, 2003-present.

Directs research and analysis on the economic and environmental impacts of renewable and conventional energy technologies in support of state and national climate and energy policies. Supervises staff energy analysts and external consultants. Plays a leading role in establishing policy positions on climate and energy issues. Serves as senior spokesperson to advocate for positions to policymakers and key constituencies and to present research at legislative, regulatory, and public forums.

**Senior Energy Analyst**, Union of Concerned Scientists, 1997-2003.

Conducted research and analysis on the economic and environmental benefits of renewable energy technologies. Developed and delivered testimony and presentations for legislative, regulatory, and public proceedings. Managed Midwest renewable energy project.

**Energy Policy Coordinator and Research Analyst**, Wisconsin Department of Administration, Energy Bureau. 1991-1997.

Led the production of a comprehensive state energy plan. Led and coordinated energy planning meetings with Energy Bureau staff, the governor's office, legislative staff, state agencies, businesses, utilities, and environmental and consumer organizations. Developed initiatives to promote the use of energy efficiency and renewable energy in multiple sectors. Provided lead analytic support to the Energy Bureau Director on electric restructuring issues. Conducted analysis on the economic and environmental impacts of energy policies and programs.

**Research Assistant**, Union of Concerned Scientists, Cambridge, Mass. 1992.

Evaluated integrated resource planning models in several states for *Powering the Midwest*.

## EDUCATION

M. S. in Land Resources and Master's Certificate in Energy Analysis and Policy, Institute for Environmental Studies, University of Wisconsin-Madison, 1991-93. Thesis title: *The Economic Impacts of Renewable Energy Use in Wisconsin*.

B. A. in Political Science and History, Gustavus Adolphus College, St. Peter, Minnesota, 1984-88. Graduated Magna Cum Laude.

## PROFESSIONAL AFFILIATIONS

U.S. Department of Energy Wind Vision Senior Peer Review Advisory Group, 2013-present.

National Wind Coordinating Collaborative Steering Committee, 1998-2010.  
Wisconsin Renewable Portfolio Standard Stakeholder Group, 2002-2003.  
Nebraska Governor's Wind Energy Task Force, 2000-2002.  
Nebraska Wind Monitoring Task Force, 1997-2000  
Wisconsin Department of Administration, Public Benefits Program Advisory Committee, 2000.

## RESEARCH REPORTS

Cleetus, R., S. Clemmer, J. Deyette, and S. Sattler. 2014. *Climate game changer: How a carbon standard can cut power plant emissions in half by 2030*. Cambridge MA: Union of Concerned Scientists.

Davis, M. and S. Clemmer. 2014. *Power Failure: How climate change puts our electricity at risk—and what we can do*. Cambridge MA: Union of Concerned Scientists.

Clemmer, S. and M. Jacobs. 2013. *Ramping up renewables*. Cambridge MA: Union of Concerned Scientists.

Fleishman, L., S. Sattler, and S. Clemmer. 2013. *Gas Ceiling: Assessing the climate risks of an overreliance on natural gas for electricity*. Cambridge MA: Union of Concerned Scientists.

Rogers, J., K. Averyt, S. Clemmer, M. Davis, F. Flores-Lopez, D. Kenney, J. Macknick, N. Madden, J. Meldrum, S. Sattler, E. Spanger-Siegfried, D. Yates. 2013. *Water Smart Power: strengthening the U.S. electricity system in a warming world*. Cambridge MA: Union of Concerned Scientists.

Fleishman, L., R. Cleetus, J. Deyette, S. Clemmer, and S. Frenkel. 2013. Ripe for retirement: An economic analysis of the U.S. coal fleet. *The Electricity Journal*. Volume 26, Issue 10, December.

Cleetus, R., S. Clemmer, E. Davis, J. Deyette, J. Downing, and S. Frenkel. 2012. *Ripe for retirement: the case for closing america's costliest coal plants*. Cambridge MA: Union of Concerned Scientists.

Clemmer, S., J. Rogers, S. Sattler, J. Macknick, and T. Mai. 2013. Modeling low-carbon US electricity futures to explore impacts on national and regional water use. *Environmental Research Letters* 8; doi:10.1088/1748-9326/8/1/015004.

Macknick, J., S. Sattler, K. Averyt, S. Clemmer, and J. Rogers. 2012. The water implications of generating electricity: Water use across the United States based on different electricity pathways through 2050. *Environmental Research Letters* 7; doi:10.1088/1748-9326/7/4/045803.

Freese, B., S. Clemmer, C. Martinez, and A. Noguee. 2011. *A Risky Proposition: The Financial Hazards of New Investments in Coal Plants*. Cambridge MA: Union of Concerned Scientists.

Clemmer, S. 2010. *Raising the Bar in Wisconsin: Increasing the State's Renewable Electricity Standard is Achievable and Affordable*, Cambridge MA: Union of Concerned Scientists.

Deyette, J. and S. Clemmer. 2010. *A Better Climate Bill: Raising Efficiency and Renewable Electricity Standards Increases Consumer Benefit*. Cambridge MA: Union of Concerned Scientists.

Deyette J. and S. Clemmer. 2009. *Clean Power, Green Jobs: A National Renewable Electricity Standard Will Create Jobs, Boost the Economy, and Protect the Environment*. Cambridge MA: Union of Concerned Scientists.

Cleetus, R., S. Clemmer, and D. Friedman. 2009. *Climate 2030: A National Blueprint for a Clean Energy Economy*. Cambridge MA: Union of Concerned Scientists.

Freese, B., S. Clemmer, and A. Noguee. 2008. *Coal Power in a Warming World: A Sensible Transition to Cleaner Energy Options*. Cambridge MA: Union of Concerned Scientists.

Freese, B., S. Clemmer. 2006. *Gambling with Coal: How Future Climate Laws Will Make New Coal Power Plants More Expensive*. Cambridge MA: Union of Concerned Scientists.

Clemmer, S. 2006. *Increasing Wisconsin's Renewable Portfolio Standard Will Create Jobs and Help Stabilize Energy Bills*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., J. Deyette, and A. Noguee. 2005. *Renewing America's Economy: A 10% National Renewable Electricity Standard Will Create Jobs and Save Consumers Money*. Cambridge, MA, Union of Concerned Scientists.

Deyette., J. and S. Clemmer. 2005. *Increasing the Texas Renewable Energy Standard: Economic and Employment Benefits*. Cambridge, MA: Union of Concerned Scientists.

Deyette J. and S. Clemmer. 2004. *The Colorado Renewable Energy Standard Ballot Initiative*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., J. Deyette, and A. Noguee. 2004. *Renewing America's Economy: A 20% National Renewable Electricity Standard Will Create Jobs and Save Consumers Money*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., J. Deyette, and A. Noguee. 2004. *Renewable Energy Can Help Ease Natural Gas Crunch*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., B. Grace, and K. Cory. 2003. *A Study to Evaluate the Impacts of Increasing Wisconsin's Renewable Portfolio Standard*. Prepared for the University of Wisconsin-Madison and the Wisconsin Division of Energy.

Clemmer, S., D. Donovan, J. Deyette, and A. Noguee. *Renewing Where We Live: What a National Renewable Electricity Standard Means for Your Region*. Cambridge, MA: Union of Concerned Scientists.

Deyette, J., S. Clemmer, and D. Donovan. 2003. *Plugging in Renewable Energy: Grading the States*, Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., D. Donovan, A. Noguee, and J. Deyette. 2001. *Clean Energy Blueprint: A Smarter National Energy Policy for Today and the Future*. Cambridge, MA: Union of Concerned Scientists with American Council for an Energy-Efficient Economy and Tellus Institute.

Donovan, D., S. Clemmer, A. Noguee, and P. Asmus. 2001. *Powering Ahead: A New Standard for Clean Energy and Stable Prices in California*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S. 2001. *Strong Winds: Opportunities for Rural Economic Development Blow Across Nebraska*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., B. Paulos, and A. Noguee. 2000. *Clean Power Surge: Ranking the States*. Cambridge, MA: Union of Concerned Scientists.

Noguee, A., S. Clemmer, B. Haddad, and B. Paulos. 1999. *Powerful Solutions: Seven Ways to Switch America to Renewable Electricity*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., A. Noguee, M. Brower, and P. Jefferiss. 1999. *A Powerful Opportunity: Making Renewable Electricity the Standard*. Cambridge, MA: Union of Concerned Scientists.

Clemmer, S., S. Olsen, and M. Army. 1998. *The Economic Impacts and Greenhouse Gas Emission Impacts of Electric Energy Efficiency Investments: A Wisconsin Case Study*. Prepared for the U.S. Department of Energy, Oak Ridge National Laboratory, Energy Fitness Program, and the Wisconsin Department of Natural Resources.

Clemmer, S., and D. Wichert. 1994. *The Economic Impacts of Renewable Energy Use in Wisconsin*. Madison, WI: Wisconsin Department of Administration, Energy Bureau.

## **PRESENTATIONS**

“Environmental, Health, & Resilience Impacts of the Power Sector,” Wind Exchange Summit, Las Vegas, NV, May 2014.

“Ramping up Renewables: Experiences Integrating Wind and Solar in the U.S. and Europe,” 8<sup>th</sup> European Conference on Green Power Markets, Geneva, Switzerland, October 2013.

“Water-Smart Power: Strengthening the U.S. Electricity System in a Warming World,” NARUC Summer Meeting, Denver, CO, July 2013.

“Water for Power: Electricity Risk and Resilience in a Warming World,” Addressing the Energy-Water Nexus, National Academy of Sciences, Washington D.C., June 2013.

“Ramping up Renewables: Clean Energy You Can Count On,” Grid Integration of Wind Energy, DOE Wind Powering America Webinar, June 2013.

“Ripe for Retirement: The Case for Closing America’s Costliest Coal Plants,” UCS webinar, November 2012.

“Wind and Water: The Water Implications of Low-Carbon Electricity Futures in the US,” AWEA Windpower 2012 Conference, Atlanta, GA, June 2012.

“A Risky Proposition: The Financial Hazards of New Investments in Coal Plants,” UCS webinar, March 2011.

“Burning Coal, Burning Cash: Ranking the States that Import the Most Coal,” Repower Florida, Orlando FL, May 2010.

“Climate 2030: A National Blueprint for a Clean Energy Economy,” National Academy of Sciences, Woods Hole, MA, July 21, 2009.

“Climate 2030: A National Blueprint for a Clean Energy Economy,” Briefing to U.S. House of Representatives staff, Washington, D.C., June 17, 2009.

“Cashing In on Clean Energy, Economic Benefits of Renewable Electricity Standards,” 2008 Midwest Ag Energy Network Summit, Madison, WI, February 6, 2008.

“Coal Power in A Warming World,” UCS National Advisory Board Meeting, Boston, MA, September 27, 2008.

“Cashing In on Clean Energy, Economic Benefits of Renewable Electricity Standards,” National Association of Manufacturers Conference, Las Vegas, NV, April 7, 2008.

“Cashing In on Clean Energy,” Washington International Renewable Energy Conference, Washington, D.C., March 6, 2008.

“Gambling with Coal: How Future Climate Laws Will Make New Coal Power Plants More Expensive,” State Capitol, Lansing MI, July 2007.

“Gambling with Coal: How Future Climate Laws Will Make New Coal Power Plants More Expensive,” NARUC Summer Meetings, New York, NY, July 16, 2007.

“Cashing In on Clean Energy,” Solar 2007 Conference, Cleveland, OH, July 11, 2007.

“Gambling with Coal: How Future Climate Laws Will Make New Coal Power Plants More Expensive,” Wind Powering America State Summit, Los Angeles, CA June 7, 2007.

“Renewing America’s Economy: Benefits of a 20% National Renewable Electricity Standard,” Phase II of Renewable Energy in America Conference, American Council on Renewable Energy (ACORE), Washington D.C., November 30, 2008.

“Hedging Future Carbon Risk with Wind Power,” Wind Powering America State Summit, Pittsburg, PA, June 8, 2006

“Renewing America’s Economy: Wind Power’s Contribution to U.S. Electricity under a National Renewable Electricity Standard,” Wind Energy Contributions in a National Energy Strategy, National Wind Coordinating Committee, Washington D.C., May 18, 2006.

“Hedging Future Carbon Risk with Wind Power,” A Capital View of Wind Integration, Utility Wind Integration Group Spring Meeting, April 6, 2006.

“Renewing Michigan’s Economy: Wind Power and Rural Economic Development,” The Future of Wind Energy in Michigan Conference, Lansing, MI, October 21, 2005.

“Renewing America’s Economy: From Crisis to Opportunity,” The Southeast & Mid-Atlantic Regional Wind Summit, Raleigh, NC, September 19, 2005.

“Renewing Minnesota’s Economy,” Minnesota Senate Committee on Jobs, Energy, and Community Development, St. Paul, MN, March 2, 2005.

“Renewing Arizona’s Economy: Wind Power and Economic Development,” Wind Energy in Arizona Conference, Tempe, AZ, January 18, 2005.

“Renewable Energy Modeling Issues in the National Energy Modeling System,” National Renewable Energy Laboratory Energy Analysis Seminar, Washington D.C., December 9, 2004.

“Wind Power and Economic Development: The Role of State and National Policies,” Community Wind Energy Conference, Minneapolis, MN, June 23, 2004.

“Costs and Benefits of Increasing Wisconsin’s Renewable Portfolio Standard,” Global Windpower 2004 Conference, American Wind Energy Association., March 30, 2004.

“Considerations for Modeling Renewable Energy in the National Energy Modeling System,” NESCAUM NE-MARKAL Stakeholder Meeting, Boston, MA, December 18, 2003.

“Harnessing Utah’s Renewable Energy Potential,” Utah Wind and Solar Conference, Salt Lake City, October 1, 2003.

“Renewable and Natural Gas: From Crisis to Opportunity,” Ideas for a Green Indiana, July 30, 2003.

”Wind Power and Economic Development: A Comparison of Recent Projects,” Windpower 2003 Conference, American Wind Energy Association, Austin, TX, May 21, 2003.

“Policies to Increase Renewable Energy in Idaho,” Idaho Legislative Briefing, Boise, ID, February 10, 2003.

“National Wind Coordinating Committee Economic Development Case Studies,” Wind Energy: New Economic Opportunities, Minneapolis, MN, November 21, 2002.

“UCS Insights on Modeling Renewables in the National Energy Modeling System,” U.S. Renewable Energy Modeling Summit, Environmental Protection Agency, Washington, DC, October 2, 2002

“Contribution of Wind Power to a National Renewable Energy Standard,” Windpower 2002, American Wind Energy Association, Portland, OR, June 4, 2002

“Harnessing the Midwest’s Biopower Potential,” Strategy Forum on Midwest Biomass Energy Development, U.S. Department of Energy Chicago Regional Office, Chicago, IL, April 25, 2002.

“How Much Does Renewable Energy Really Cost? Impacts of a National Renewable Energy Standard,” NEMS 2002 Conference, Energy Information Administration, Washington, DC, March 12, 2002.

“Harnessing the Upper Midwest’s Bioenergy Potential,” Upper Midwest Renewable Energy and Agriculture Summit, St. Paul, MN, February 4, 2002.

“Renewing North Dakota: How a National Renewable Energy Standard Will Benefit North Dakota’s Economy,” Wind Energy and Rural Development in North Dakota III Workshop, Grand Forks, ND, February 22, 2001.

“Policies to Promote Wind Power in Illinois,” Illinois Wind Workshop: Power a Strong Economy, Chicago, IL, November 27, 2001.

“Strong Winds: Opportunities for Rural Economic Development Blow Across Nebraska,” Windpower 2001, American Wind Energy Association, Washington DC, June 7, 2001.

“A Powerful Opportunity: Making Renewable Electricity the Standard in Iowa,” Governor’s Energy Policy Task Force Meeting, Des Moines, IA, January 3, 2001.

“Wind Power Surge: State Policies and Wind Power Development,” Nebraska Wind Energy Forum, Lincoln, NE, September 20, 2000

“Clean Power Surge: Making Renewable Electricity the Standard,” NARUC Summer Committee Meetings, Los Angeles, CA, July 23, 2000.

“Emerging Markets for Geothermal Power: Opportunities from Electricity Restructuring,” Geothermal Energy in Nevada and the West Conference, Reno, NV, July 6, 2000.

“Strong Winds: Opportunities for Rural Economic Development in Iowa,” Windpower 2000, American Wind Energy Association, Palm Springs, CA, May 1, 2000.

“A Powerful Opportunity: Making Renewable Electricity the Standard,” Electricity Restructuring and the Environment Congressional Briefing, Washington, DC, April 3, 2000.

“A Powerful Opportunity: Making Renewable Electricity the Standard,” Minnesota Legislative Electric Energy Task Force Restructuring Hearing, St. Paul, MN, December 14, 1999.

“A Powerful Opportunity: Making Renewable Electricity the Standard,” U.S House of Representatives Restructuring Briefing, Washington DC, June 19, 1999.



“Emerging Markets for Wind Power: The Potential Impacts of Federal and State Renewables Policies,” Windpower 1999, American Wind Energy Association, Burlington VT, June 19, 1999.

“Powerful Solutions for Wisconsin: 7 Ways to Switch to Renewable Electricity,” Wisconsin Committee on Utility Public Benefit Programs, January 7, 1999.

## **REGULATORY PROCEEDINGS**

Testimony on the Application by Otter Tail Power Company and Others for Certification of Transmission Facilities in Western Minnesota (OAH No. 12-2500-17037-2 MPUC Dkt. No. CN-05-619) and the Application to the Minnesota Public Utilities Commission for a Route Permit for the Big Stone Transmission Project in Western Minnesota (OAH No. 12-2500-17038-2 MPUC Dkt. No. TR-05-1275), Minnesota Public Utilities Commission, December, 21, 2007.

Testimony on the Application by Otter Tail Power Company on behalf of the Big Stone II Co-owners for an Energy Conversion Facility Siting Permit for the Construction of the Big Stone II Project, Case No EL05-022, South Dakota Public Utilities Commission, May 19, 2006.

Joint Comments on Otter Tail Power Company’s 2006-2020 Resource Plan, Docket No. E-017/RP-05-968, Minnesota Public Utilities Commission, January 3, 2006.

Joint Comments on Missouri River Energy Services’ 2006-2020 Resource Plan, Docket No. ET10/RP-05-1102, and Great River Energy’s 2005-2020 Integrated Resource Plan Docket No. ET2/RP-05-1100, Minnesota Public Utilities Commission, December 1, 2005.

Joint Comments on Xcel Energy’s 2004 Resource Plan, Docket No. E-002/RP-04-1752, Minnesota Public Utilities Commission, August 1, 2005.

Comments on Proposed Rule Amendment for the Environmental Portfolio Standard Rules, Docket No. RE-00000C-05-0030, Arizona Corporation Commission, February 17, 2005.

Comments on Proposed Amendments to the Renewable Energy Portfolio Standard N.J.A.C. 14:4-8, Docket Number EX 03080616, New Jersey Board of Public Utilities, December 4, 2003.

Comments on Proposed Rule Renewable Energy as a Source of Electricity, Title 17 Chapter 10 Part 573, Utility Case 3619, New Mexico Public Regulation Commission, October 23, 2002.

Comments on Rulemaking Relating to Renewable Energy Mandate Under Section 39.904 of the Utilities Code, Project No. 20944, Public Utility Commission of Texas, July 12, 1999

Comments on MidAmerican Energy Company Net Metering Challenge, Federal Energy Regulatory Commission, Docket No. EL99-3-000, December 2, 1998.

Comments on Northern States Power’s 1998 Integrated Resource Plan, Docket No. E-002/RP-98-32, Minnesota Public Utilities Commission, July 6, 1998.

Comments on Iowa Utilities Board's proposed rule to discontinue net billing arrangements, Iowa Utilities Board, Docket No. RMU-97-12, January 5, 1998.

## **LEGISLATIVE HISTORY**

Presented testimony and comments regarding legislation concerning renewable energy, energy policy, and utility regulation before:

- U.S. Senate Committee on Energy
- U.S. Senate Committee on Agriculture, Nutrition and Forestry
- U.S. House of Representatives Committee on Science, Subcommittee on Energy and Environment
- U.S. House of Representatives, Committee on Energy & Commerce, Subcommittee on Energy and Power
- Idaho Legislative Committee
- Iowa Governor's Energy Policy Task Force
- Maryland Senate Committee on Finance
- Maine Committee on Energy, Utilities & Technology
- Minnesota Legislative Electric Energy Task Force
- Minnesota Senate Committee on Jobs, Energy, and Community Development
- Nebraska Revenue Committee
- Nebraska Governor's Wind Energy Task Force
- Texas House of Representatives Regulated Industries Committee
- Wisconsin Joint Committee on Utility Public Benefit Programs

## **HONORS AND AWARDS**

Special Achievement Award, "For effective advocacy that will result in substantial amounts of new clean energy serving the state of California," American Wind Energy Association, Windpower 2003.

Wind Energy Advocacy Award, "For outstanding effectiveness in supporting sustainable energy policies at national, regional, and state levels," American Wind Energy Association, Windpower 2002.

Exceptional Performance Award, Wisconsin Department of Administration, 1996.

1st Place Publication Award by the Interstate Renewable Energy Council for *The Economic Impacts of Renewable Energy Use in Wisconsin*, 1994.