# STACIA J. HARPER

948 Vandalia Rd. Morgantown, WV 26501 Tel: (304) 290-2154

Email: sharper@mix.wvu.edu

# SUMMARY OF CURRENT EDUCATION AND PROFESSIONAL EXPERIENCE

2018-2023 PhD Graduate Student, West Virginia University, Davis College of Agriculture, Natural Resource and Design, Division of Resource Economics and Management. Research focus is using econometrics and geospatial information systems (ARCPro) to model implications of climate stress across population and landscape. Expected graduation Dec 2023, PhD.

Graduate Research Assistant, NASA Climate Change Research Initiative, "Connecting the Local Urban Fabric to Global Climate Change." Recipient of competitive graduate research opportunity with NASA to research temperature changes resulting from land-use and urbanization and the spatial connections to population.

Graduate Teaching Assistant, West Virginia University, Davis College of Agriculture, Natural Resources and Design, Division of Resource Economics and Management. Responsible for the instruction and all other aspects associated with teaching ARE 187 Energy Resource Economics, including development of syllabus, lectures, exams, supplemental materials, grading, and student enrichment.

Consultant, Resource Insight, Inc. Expertise in wholesale-power market operations, design and evaluation of utility energy efficiency and renewable programs, economics of smart grid, AMI investments, and capital expenditure plans, and development of cost allocation and rate design. Expert witness and senior analyst for smart grid program development and market integration, power plant shutdown/startup, integration of intermittent resources, and utility cost of service proceedings. Notable achievements included implementation of utility regulation/cost recovery and rules for the implementation of microgrids in Puerto Rico post Hurricane Maria; co-author "Avoided Energy Supply Costs in New England".

2018-20221

2016–2018

2010-2015 Director Regulatory Affairs and Energy Markets, Ohio Partners for Affordable Energy. Responsible for representing the interest of lowincome residential energy consumers in Ohio public utility regulatory proceedings and utility collaboratives. Expert witness on electric and naturalgas markets, price forecasts, competitive rate design, dynamic pricing, wholesale transmission markets, consumer programs and smart grid deployments. Direct engagement with transmission policy groups, IMM, environmental groups, utilities and regulators on RTO/ISO operations and state policy. Notable achievements included creation of participation from low-income energy efficiency/weatherization programs in PJM capacity markets resulting in utility revenues of \$22 million and over \$220 million in savings to Ohio consumers from utility-sponsored low-income energy efficiency programs; design and implementation of residential smartmetering and smart-grid deployments for AEP, Duke Energy, First Energy; and, development of financing structures for solar PPAs, community solar opportunities, and on-bill financing.

2008–2010 Senior Energy Policy Advisor, Ohio Consumers' Counsel. Responsible for engagement with PJM, MISO, FERC, NERC, and utility stakeholder engagement while representing residential interest. Expert analyst for electric power industry restructuring, competitive market design, long-term planning, demand response, transmission planning, SmartGrid, climate change, renewable energy, auction design, and development of market strategy in Ohio regulatory proceedings.

Senior Analyst Pricing and Portfolio Management, Direct Energy. Responsible for the gross margin management and product development of retail energy products for natural gas commercial and industrial customers. Led the development of consumer segmentation studies and load profile analysis used for pricing and hedging strategies. Responsible for providing senior management energy market update briefings inclusive of commodity pricing trends, gas pipeline flows, RTO markets and emerging market opportunities.

2004–2006 Energy Trader, American Electric Power Company. Managed supply and demand analytics. Developed commodity price offers for municipal and large industrials. Managed pricing models and market forecasts for gas storage, locational energy pricing, capacity, and ancillary services

2001-2004 Economist, U.S. Department of Energy, National Energy Technology Laboratory/SAIC. Assisted in the development and analysis of domestic and international energy policies. Econometric modelling for short-term and long-term power pricing, base fuel commodity markets, and estimates of demand and resource supply. Performed cost benefit analysis of competing fuel/power technologies (i.e., IGCC, wind, fuel cells, battery, etc), and evaluation of real-time power pricing programs.

### PRIOR EDUCATION

PhD Studies., Department of Resource and Environmental Economics (2000-2005)

M.S., Department of Resource and Applied Economics, University of Alaska Fairbanks, 2000.

BA, Political Science, West Virginia University, 1995.

BA, Economics, West Virginia University, 1995.

### PRIOR TEACHING EXPERIENCE

Columbia College (MO), Economics Adjunct Faculty. Micro and Macro economics.

University of Alaska Fairbanks (AK), Graduate Research and Teaching Assistant. Energy Economics.

Cooperative Education Services (WA), Math Instructor. Algebra and Geometry.

### **PUBLICATIONS**

"Social entrepreneurs and grant professionals: Sustaining environmental and energy resources." (with Harper-Dorton, K. V.) Strategy Papers, Journal of the Grants Professionals Association, 2(5)1-6. 2015.

"Environmental Justice and the Water/Energy Nexus: A Quest in Progress for Rural People." (with Harper-Dorton, K. V.) Contemporary Journal of Rural Social Work, 7, 12-25. 2015.

"Smart Grid Hype & Reality: A Systems Approach to Maximizing Customer Return on Utility Investment" Book Review. Wired Group Publishing Lakewood, CO. 2014.

## SELECTED PRESENTATIONS

"Introduction to Market Failure," at National Energy Technology Laboratory. Morgantown, WV. February 28, 2003.

"Demand Response Enabling Behavior Modification: Markets, Customers, Regulators," at the OPSI 5<sup>th</sup> Annual Meeting. Carmel, Indiana. October 1, 2008.

"Considering the Consumers' Perspective," at the Peak Load Management Alliance Conference on The Changing Face of Electric Utilities. Webcast. November 23, 2010.

"What are the Best Utility Program Design for Weatherization Partnerships?" at 2011 National Community Action Foundation's Energy and Community Economic Development Conference. St. Petersburg, Florida. October 25, 2011

"Environmental Change and Sustainable Social Development: Integrating Economic, Environmental, and Social Perspectives," at Social Work Social Development 2012: Action and Impact, Stockholm, Sweden. July 8–12. 2012.

Panelist at Ohio Retail Electric Market Investigation hosted by the Ohio Public Utilities Commission. Columbus Ohio. July 30, 2013.

"The Customer of Today, Tomorrow, and the Future: Low-Income Consumer Perspectives," at the SmartGrid Consumer Collaborative Annual Meeting. Raleigh, North Carolina. October 2, 2014.

"Moving Community Action and Weatherization Forward; Designs for Weatherization and Health Partnerships," at the 2014 Energy Partnerships Conference. Washington D.C. August 6, 2014

"Reinventing the Regulatory Compact," at the SmartGrid Consumer Collaborative Annual Meeting. San Diego, California. February 2, 2015.

"When are Smart Grid and Distributed Energy Resources Good for Low Income Consumers?" Panelist at National Town Meeting on Demand Response and Smart Grid. Washington D.C. May 28, 2015

### EXPERT TESTIMONY

**1. PUCO Case No. 09-906-EL-SSO**; FirstEnergy Standard Service offer and Energy Security Plan; Ohio Consumers' Counsel. December 4, 2009.

Support for market based procurement process.

2. PUCO Case No. 10-176-EL-ATA; FirstEnergy Application for Tariff Approval; Ohio Partners for Affordable Energy. January 10, 2011

Proposed pilot solar/wind project as part of a long-term solution to meet the affordable electric needs of legacy all-electric customers.

**3. PUCO Case No. 12-1842-GA-EXM;** Dominion East Ohio Exemption for Natural Gas Sales or Services; Ohio Partners for Affordable Energy. October 4, 2012.

Competition in natural gas markets, role of standard service offers, efficiency of auction processes currently used, support for continuation of program.

**4. PUCO Case No. 12-2637-GA-EXM**; Columbia Gas Exemption for Natural Gas Sales or Services; Ohio Partners for Affordable Energy. November 30, 2012.

Support for continuation of standard offer process as opposed to an exit of the merchant function.

**5. PUCO Case No. 13-753-EL-POR**; Duke Energy Ohio Application for Program Approval; Ohio Partners for Affordable Energy. September 9, 2013.

Support for recovery of program costs, lost distribution revenue and performance incentives related to energy efficiency and demand response programs.

**6. Ohio Senate Bill 58/House Bill 302 131st General Assembly**; Ohio Partners for Affordable Energy. December 11, 2013.

Opposition to removal of Ohio renewable portfolio standards and energy efficiency mandates.

### TASK FORCE AND COMMITTEE ENGAGEMENTS

NASUCA Special Committee on RTO Governance (2009)

Ohio Retail Market Investigation Committee, Market Evaluation Subcommittee, Consumer Lead (2013–2014)

PJM Capacity Forum Ohio Consumer Representative, (2010–2013),

SmartGrid Interoperability Panel, Ohio Consumer Representative (2010)

NERC Planning Committee Large End User Representative, Elected (2010–2015)

Ohio Energy Roundtable (2012–2015)

Ohio Special Committee on Energy Efficiency (2012–2013)

Ohio Falls Prevention Coalition (2014–2015)

STAND, Ohio Healthy Homes Network (2013–2015)

American Electric Power Utility Energy Efficiency and Demand Side Management Collaborative, (2010–2015)

First Energy Ohio, Energy Efficiency Collaborative (2010-2015)

Duke Ohio Energy Efficiency and Demand Side Management Collaborative (2010–2015)

Duke Ohio SmartGrid Collaborative (2010–2015)

Columbia Gas Energy Efficiency Collaborative (2010–2015)

SmartGrid Consumer Collaborative, Board Member (2012–2015)

#### COMMENTS PREPARED

U.S. Federal Energy Regulatory Commission; Proposed Policy Statement and Action Plan, Smart Grid Policy; Docket No. PL09-4-000. Office of the Ohio Consumers' Counsel. Reply Comments June 2, 2009.

U.S. Department of Energy; Request for Information, Implementing the National Broadband Plan by Empowering Consumers and the Smart Grid: Data Access, Third Party Use and Privacy; National Association of State Utility Consumer Advocates. Comments July 12, 2010. Reply Comments August 9, 2010.

Public Utilities Commission of Ohio; First Energy Ohio Companies Ohio Site Deployment of the Smart Grid Modernization Initiative and Timely Recovery of Associated Costs.

Cases 09-1820-EL-ATA, 091821-EL-GRD, 09-1822-EL-EEC, 09-1823-EL-AAM. Ohio Consumers Counsel. Initial Comments January 15, 2010.

Public Utilities Commission of Ohio; First Energy Ohio Companies Competitive Bidding Process for Standard Service Offer Electric Generation Supply; Case No. 09-906-EL-SSO. Ohio Consumers Counsel. Brief January, 2010.

U.S. Federal Energy Regulatory Commission; Demand Response Compensation in Organized Wholesale Energy Markets; Docket No. RM 10-17-000; Joint Consumer Advocates. Comments May 13, 2010.

U.S. Federal Energy Regulatory Commission; Technical Conference on RTO/ISO Responsiveness; Docket No. ER09-1063-000, Docket No. ER 09-1142-000. National Association of State Utility Consumer Advocates (NASUCA). Comments March 8, 2010.

Public Utilities Commission of Ohio; Duke SmartGrid Investment; Case No. 10-867-DR-IM. Ohio Partners for Affordable Energy. Comments November 24, 2010.

U.S. Federal Energy Regulatory Commission; RTO/ISO Metrics; Docket No. AD10-5-000. Ohio Consumers' Counsel. Comments March 5, 2010.

U.S. Federal Energy Regulatory Commission; RTO/ISO Governance; Docket Nos. ER09-1048-000, ER-09-1049-000, ER09-1050-000/ER09-1192-000, ER09-1051-000, ER09-1063-000, ER09-1142-000. NASUCA. Comments March 8, 2010.

Public Utilities Commission of Ohio; Consumer Privacy Protection, Customers Data Access, And Cyber Security Issues Associated with Distribution Utility Advanced Metering and Smart Programs; PUCO Case No. 11-277-GE-UNC; Ohio Partners for Affordable Energy. Comments March 7, 2011.

U.S. Federal Energy Regulatory Commission; New Electric Storage Technologies; Docket No. AD10-13-000. Ohio Consumers Counsel. Comments August 22, 2011.

Public Utilities Commission of Ohio; Review of Time-Differentiated and Dynamic Pricing Options for Retail Electric Services; Case No. 12-150-EL-COI. Ohio Partners for Affordable Energy. Comments April 11, 2012.

Public Utilities Commission of Ohio; Investigation of Ohio's Retail Electric Service Market; Case No. 12-3151-EL-COI. Ohio Partners for Affordable Energy. Comments March 1, 2013. Low Income Advocates. Reply Comments April, 5, 2013.

Public Utilities Commission of Ohio; Investigation of Marketing Practices in the Competitive Retail Electric Service Market; PUCO Case No. 14-568-EL-COI. Ohio Partners for Affordable Energy. Comments May 9, 2014.

U.S. Environmental Protection Agency; Carbon Pollution Emission Guidelines for Existing Stationary Sources—Electric Utility Generating Units; Proposed Rule, 79 Fed. Reg. 34830, Docket No. EPA-HQ-OAR-2013-0602. Public Citizen and Ohio Partners for Affordable Energy; Comments December 1, 2014.