## JENNA K. MCGRATH

Georgia Institute of Technology mcgrathj@gatech.edu | (614) 371-5155

#### **EDUCATION**

Georgia Institute of Technology, School of Public Policy, Atlanta, GA

December 2018

PhD Candidate, concentration in Energy & Environmental Policy

Boston University, College of Arts and Science, Boston, MA

January 2012

M.A. in Energy and Environmental Analysis

Boston University, College of Arts and Science, Boston, MA

May 2011

B.A. in Environmental Policy and Analysis

# PREVIOUS EMPLOYMENT / RESEARCH APPOINTMENTS

## Lawrence Livermore National Laboratory, Livermore, CA

April 2017-August 2017

Global Security Program, Graduate Scholar

Worked on various projects relating to electric grid physical and cybersecurity.

# Graduate Teaching Assistant, Georgia Tech, Atlanta, GA

Fall 2016

PHIL 3127: Science, Technology, and Human Values

Designed class projects / lead two weekly recitation sessions (each with 30+ students).

# Graduate Research Assistant, Georgia Tech, Atlanta, GA

Fall 2015-Spring 2016

Funded as part of the Sam Nunn Security Program award, researched terrorism and the electric grid under Dr. Margaret Kosal,

Nanoramic Laboratories (formerly FastCAP Systems), Boston, MA

September 2011-July 2013

Research & Business Development Analyst

## Massachusetts Clean Energy Center, Boston, MA

June 2011-August 2011

Clean Energy Sector Development Fellow

#### **PUBLICATIONS**

**McGrath, J.K.**, M.E. Kosal. "Terrorist Attacks on Electricity Infrastructure." In preparation for submission to *Terrorism and Political Violence*, 2018.

**McGrath, J.K.**, V. Thomas. "Public and Private Response to Incidents Impacting Critical Infrastructure." In preparation for submission to Public Administration Review, 2018.

**McGrath, J.K.,** "Will Updated Electricity Infrastructure Security Protect the Grid? A Case Study Modeling Electrical Substation Attacks." *Infrastructures* special issue "Resilient Infrastructures Systems," November, 2018. https://doi.org/10.3390/infrastructures3040053

McGrath, J.K., "Exploring the Contributing Factors Associated with Intelligence Failures During the Cold War." Published in *Technology and the Intelligence Community: Challenges and Advances for the 21st Century* (69-82), part of the "Advanced Sciences and Technologies for Security Applications" series. Springer, 2018. https://doi.org/10.1007/978-3-319-75232-7

Flowers, M., M. Smith, A. Parsekian, D. Boyuk, **J.K. McGrath**, L. Yates. "Climate Impacts on the Levelized Cost of Solar Energy." *Energy Policy*, July 2016.

http://dx.doi.org/10.1016/j.enpol.2016.04.018

## **AWARDS**

#### Cybersecurity Fellow, Georgia Tech

January 2018-May 2018

Funded by the Institute for Information Security and Privacy

"Energy in an Information Age" Research Grant, Georgia Tech

January 2017-March 2018

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Interdisciplinary research grant awarded by the Strategic Energy Institute for dissertation research on "Risk of Combined Physical-Cyberattacks Against Electricity Infrastructure"

# Sam Nunn Security Program Fellow, Georgia Tech

Fall 2015-Spring 2016

Funded by the MacArthur Foundation's Science, Technology, and Security Initiative

### Finalist at the C3E Women in Clean Energy Symposium

November 4-5, 2015

One of 10 selected graduate students to present a poster at the Symposium, hosted by Massachusetts Institute of Technology (MIT)

## NSF Integrative Graduate Education & Research Traineeship (IGERT) Fellow

2013-2015

Two-year National Science Foundation Award at Georgia Tech with a focus on Nanomaterials for Energy Storage and Conversion

#### **PRESENTATIONS**

**McGrath, J.K.** (2018, November) *Physical and Cyber-Enabled Attacks on U.S. Electric Grid Infrastructure: A National Security Threat.* Panel paper presented at the Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, Washington, D.C.

**McGrath, J.K.** (2017, November) From Targeted Attacks to Weather, How Do Disruptions on the Electric Grid Impact U.S. Policy Decisions? Panel paper presented at the Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, Chicago, IL.

**McGrath, J.K.** (2016, December) *U.S. Electricity Infrastructure Policy Interventions: How Do Incident Characteristics Impact Policy Decisions?* Panel paper presented at the International Education Forum – hosted by Tokyo Institute of Technology's Learning Graduate Schools "Academy for Co-Creative Education of Environment and Energy Sciences (ACEEES). San Diego, CA.

**McGrath, J.K.** (2016, September) *Targeted Attacks Against U.S. Electricity Infrastructure*. Paper presented at the Energy Policy Research Conference – hosted by Boise State Energy Policy Institute, Santa Fe, NM.

**McGrath, J.K.**, M.E. Kosal. (2016, January) *Terrorist Attacks On U.S. Electricity Infrastructure*. Paper presented at the Career, Research and Innovation Development Conference - Ivan Allen College Paper Competition, Atlanta, GA.

**McGrath, J.K.**, V. Thomas. (2015, November) *Can Hydraulic Fracking Reduce the Cost of Enhanced Geothermal Systems?* Poster presented at the Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, Miami, FL.

McGrath, J.K., V. Thomas. (2015, November) Can Hydraulic Fracking Reduce the Cost of Enhanced Geothermal Systems? Poster finalist at the C3E Women in Clean Energy Symposium, Cambridge, MA. McGrath, J.K., & J. Moreno-Cruz. (2014, November) Hydraulic Fracturing Practices Explored through County Demographics in Texas. Panel paper presented at the Association for Public Policy Analysis and Management (APPAM) Fall Research Conference, Albuquerque, NM.

#### **SOFTWARE**

Proficient in all major Office Packages. Experience and programming skills in: Stata, R, LexisNexis, CARTO

#### SYNERGISTIC EXPERIENCE / ACTIVITIES

Organizing Chair - Georgia Tech Energy Club's Annual Energy Expo

2015-2017

Writer & Events Coordinator - Boston University School of Education "Green" Organization

Vice President - Boston University Running Club

2009-2011

2010