EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY Ph.D. Candidate, Energy & Resources Group (current)

Dissertation (in progress): *The Creation of Enemies: Conservatives and the Environment in U.S. Society,* 1940-1980 Advisors: Dan Kammen (ERG), Kate O'Neill (ESPM), Alastair Iles (ESPM), Rebecca McLennan (History)

Joint Thesis:

Climate Change Adaptation and Risk Assessment in California's Electric Power Sector

COLUMBIA UNIVERSITY SCHOOL OF LAW J.D., May 2006

Editor-in-Chief, Columbia Journal of Environmental Law

Stone Scholar (top 1/3 of class), Warner Gardner Summer Research Fellow

ARIZONA STATE UNIVERSITY B.A. (Italian), May 2002

summa cum laude

ACADEMIC CAREER

PUBLICATIONS

Orford, A.D., Nation's Business and the Environment: the U.S. Chamber's Changing Relationships with Pollution, "Ecologists," Regulations, and Renewables, 1945-1981 (submitted for review at J. of Envtl. Studies and Sciences).

Orford, A.D., *The Clean Air Act of 1963: Postwar Environmental Politics and the Debate Over Federal Power*, 27 Hastings Envtl. L. J. __ (forthcoming summer 2021).

Orford, A.D., <u>Tools for Regulators in a Changing Climate: Proposed Standards, State Policies, and Case Studies from the Western Grid</u>, 32 GEO. ENVTL. L. REV. 227 (2020).

Orford, A.D., <u>Using Public Datasets to Evaluate Atrazine Intensity and Birth Defects</u> (manuscript)

RESEARCH POSITIONS

Graduate Student Researcher, California Energy Commission (San Francisco, CA) 2017-2018. CEC Grant EPC 15-078: Risk Modeling and Cognitive Science Characterization of Barriers to Climate Change Adaptation in the California Power Sector. Analyzed institutional barriers to incorporation of climate change adaptation measures into electric utility regulatory processes.

Policy Researcher, Office of Comm'r Carla J. Peterman, California Public Utilities Commission (San Francisco, CA) Summer 2016. Provided policy analysis and recommendations on telecommunications competition, electric utility environmental matters. Supported advisors in review of all matters on Commission agenda.

Graduate Student Researcher, California Public Utilities Commission Energy Division (San Francisco, CA) 2015-2016. Advised on research, development, and deployment of vehicle-grid integration technologies; evaluated utility rate recovery policy and inter-agency coordination of same; supported independent review of state energy research funding programs.

TEACHING POSITIONS

Graduate Student Instructor, University of California, Berkeley (2016-present)

(course name, course code, professor, term, and subject)

U.S. History, American Civil War to Present (HIS 7B) (Rebecca McLennan) (Spring 2020). Undergraduate introduction to U.S. history and historical analysis.

Environmental Administration, Policy, and Law (ESPM 60) (Alastair Iles) (Fall 2019). Undergraduate introduction to environmental regulatory administration and governance.

Bioethics (ESPM 162) (Ken Worthy) (Spring 2019). Upper-division undergraduate introduction to ethical analysis of the scientific endeavor, with special attention to biological and environmental sciences.

Environmental Philosophy and Ethics (ESPM 161) (Ken Worthy) (Fall 2018). Upper-division undergraduate introduction to ecologically-oriented philosophical writings and practices.

International Environmental Politics (ESPM 169) (Kate O'Neill) (Fall 2017). Upper-division undergraduate introduction to environmental governance under United Nations regulatory frameworks.

Energy and Society (ER 100/200) (Ranjit Deshmukh) (Summer 2017). Upper-division undergraduate and graduate survey of energy technology, governance, finance, economics, development, and analytical tools.

Climate and Energy Policy (ESPM 102D) (Jonas Meckling) (Spring 2017). Upper-division undergraduate energy policy survey and analysis of energy and climate policies along economic, political, and technical criteria.

Energy and Civilization (UGBA 193B/L&S 126) (Jamie Rector & Chris Rosen) (Fall 2016). Undergraduate energy survey course, part of UC Berkeley's "Big Ideas" multi-disciplinary curriculum.

Curriculum design. Developed Energy and Civilization (above) with the course instructors and another student.

Teaching Fellowship: Graduate Remote Instruction Innovation Fellow (summer 2020). Research and development of best practices for remote teaching.

PRESENTATIONS

Guest lecturer. Invited to speak by professor of record:

- "Environmental Litigation" for International Environmental Politics (O'Neill) (2018 & 2019) (90 min.).
- "Environmental Litigation" for Environmental Administration, Policy, and Law (Iles) (2019) (90 min.).
- "Questioning Scientific Positivism" for Bioethics (Worthy) (2019) (60 min).
- "Renewable Energy Policy" for Global Warming (Sayre) (2018) (90 min.).
- "Climate and Energy Policy" for Energy & Society (Deshmukh) (2017) (60 min.).
- "Environmental and Energy Law" for Energy & Civilization (Rector & Rosen) (2016) (60 min.).

California Plug-in Electric Vehicle Collaborative Annual Meeting, Sacramento (July 2016). Second Annual California Multi-Agency Update on Vehicle-Grid Integration Research, Sacramento (Dec. 2015).

MEMBERSHIPS AND AFFILIATIONS

American Bar Association, Section of Environment, Energy, and Resources American Society for Environmental History Association for Environmental Studies and Sciences Association for Public Policy Analysis and Management

ACADEMIC SERVICE

U.C. BERKELEY

ENERGY AND RESOURCES GROUP

Faculty Search Committee – Equity & Sustainability (2019-2020) Admissions Committee (2017, 2018) Affiliate Faculty Brown Bag Coordinator (2017-2019)

GRADUATE ASSEMBLY (GRADUATE STUDENT GOVERNMENT)

President, 2019-2020 Vice President of Finance, 2018-2019 Departmental Delegate, 2016-2018

CAMPUS COMMITTEES

COVID-19 Financial Response and Basic Needs Workgroup (2020)

Chancellor's Task Force on Instructional Resilience (2019-2020)

Chancellors Advisory Committee on Student Services and Fees (2018-2020)

Search committee, U.C. Berkeley Vice Chancellor of Finance (2019-2020)

Search committee, Associate Vice Chancellor and Dean of Students (2019-2020)

Search committee, Executive Director, Student Union (2019-2020)

Search committee, CFO, Division of Student Services (2019)

Chancellor's Advisory Committee on Parking and Transportation (2016-2018)

U.C. Berkeley Student Union Board of Directors (2018-2020)

Lower Sproul Plaza Fee Committee (2018-2020)

Wellness Fee Advisory Committee (2018-2020)

Student Equity and Success Fee Committee (2018-2019)

The Green Initiative Fund Advisory Committee (2018-2019)

Life Safety Fee Committee (2018-2019)

Student Technology Fee Committee (2018-2019)

Educational Opportunity and Equity Fee Committee (2018-2019)

Course Materials Fee Committee (2018-2019)

Faculty Mentorship Award Committee (2016-2018)

PROFESSIONAL CAREER

EMPLOYMENT

Senior Associate, Marten Law PLLC (Portland, OR) 2009-2013. Conducted and managed complex multi-party environmental, energy, and natural resources litigation. Responsibilities including legal research, brief drafting, discovery, expert witness preparation, court appearances, settlement planning. Clients included energy developers, irrigation interests, manufacturers, state and local governments, and small businesses. Matters involved air and water pollution, hazardous waste management and remediation, state and federal permitting and environmental review, endangered species, water rights, federal power purchase agreements, stormwater management.

Associate, Arnold & Porter LLP (New York, NY) 2007-2009. Supported complex environmental litigation. Clients included state and local governments, energy and industrial concerns, real estate developers, environmental non-profits. Matters involved regional electricity transmission planning, permitting and environmental review of natural gas infrastructure and urban development, transportation infrastructure, constitutional challenges to local laws. Assisted in defense of *Native Village of Kivalina v. ExxonMobil* (landmark climate change litigation).

Associate, Willkie Farr & Gallagher LLP (New York, NY) 2006-2007. Corporate group (assigned after departure of NYC environmental group just prior to my arrival). Assisted in corporate mergers and acquisition, securities disclosure. Worked with D.C. environmental group on CERCLA matters.

Clinic Researcher, Columbia Environmental Law Clinic (New York, NY) 2005-2006. Drafted Second Circuit briefing on EPA cost-benefit approach to rulemaking. Argument adopted by then-judge Sonia Sotomayor, rejected by Justice Scalia in *Entergy Corp. v. EPA*, 556 U.S 208 (2009).

Research Assistant, Columbia University School of Law (New York, NY) 2004-2005. Prof. Samuel Issacharoff. Researched and edited *Civil Procedure* (*Concepts and Insights*). New York, NY: Foundation (2005). Recognized for outstanding research assistance (summer 2004).

CLEs TAUGHT

- > Hydraulic Fracturing, Water Resources Issues (Los Angeles, September 2013)
- > Energy Policy in the Second Obama Administration (Los Angeles, July 2013)
- > Hydraulic Fracturing, Water Quality Issues (Seattle, May 2013)
- > Hydraulic Fracturing, Water Resources Issues (Santa Barbara, February 2013)
- > Klamath Basin Adjudication Update (Portland, November 2012)
- > NEPA and Transmission Lines (Portland, August 2012)
- > Hydraulic Fracturing, Emerging Water Resources Issues (Houston, June 2012)
- > Hydraulic Fracturing, Regulatory Overview and Trends (Dallas, December 2011)

AFFILIATIONS

- > Admitted to practice law in New York (2007-present)
- > Admitted to the bar of the United States Court of Appeals for the Second Circuit (2006-present)
- > Board of Directors, Columbia Journal of Environmental Law (2007-present)
- > Charter member, New York City Environmental Law Leadership Institute (NYCELLI)

PROFESSIONAL WRITING

Editor-Reviewed Legal Practitioner Publications

Orford, A. (2013). Power to the People: Primer on NEPA and Transmission Lines. *Natural Gas & Electricity*, 29(10), 16–22. https://doi.org/10.1002/gas.21687

Orford, A., Till, D., & Timmons, D. (2013). Examining oil and gas policy in President Obama's second term. *Natural Gas & Electricity*, 29(7), 1–7. https://doi.org/10.1002/gas.21663

Orford, A. (2013). Hydraulic Fracturing & Water: Considering the Water Resources Impacts of Hydraulic Fracturing. *The Water Report* 85, 4-8 (Mar. 15, 2011).

Orford, A (2011). Hydraulic Fracturing: Legislative and Regulatory Trends. The Environmental Counselor, 279: 2, 4.

Orford, A. Fractured: The Road to the New EPA Fracking Study. The Environmental Counselor 267 (2010): 1, 3.

Issacharoff, S. & Orford, A. A Primer on American Law of Jurisdiction and Forum Selection, *Global Justice Forum* (Apr. 2005).

Professional Newsletter Publications

Orford, A. Hydraulic Fracturing: Latest Developments and Trends. Marten Law Envtl. News (Oct. 6, 2013).

Orford, A. BLM Revises Draft Regulations Governing Hydraulic Fracturing on Public and Tribal Lands: Comments Due August 23. *Marten Law Envtl. News* (July 15, 2013).

Orford, A. <u>NEPA: California Federal Court Requires Full Environmental Impact Statement for BLM Leases Involving Hydraulic Fracturing</u>. *Marten Law Envtl. News* (May 6, 2013).

Orford, A. <u>Water Resources - Not Just Water Quality – Gains Attention of Opponents to Hydraulic Fracturing</u>. *Marten Law Envtl. News* (Apr. 22, 2013).

Orford, A. Supreme Court Declines to Resolve Interplay Between CERCLA Cost Recovery and Contribution Provisions, *ABA SEER Superfund and NRD Litigation Committee Newsletter* (Dec. 2012).

Orford, A. <u>Hydraulic Fracturing in California</u>: Oil Boom on the Horizon; Groups Seek Statewide Injunction Pending Review; State Considering Regulation. *Marten Law Envtl. News* (Nov. 9, 2012).

Orford, A. <u>Hydraulic Fracturing Cumulative Impacts Must Be Considered in NEPA Review of Gas Pipeline, Project Opponents Maintain</u>. *Marten Law Envtl. News* (Sept. 25, 2012).

Orford, A. <u>EPA To Regulate Air Emissions from Hydraulic Fracturing As Industry Comes Under Scrutiny</u>. *Marten Law Envtl. News* (May 29, 2012).

Orford, A. <u>Local Bans on Hydraulic Fracturing Upheld in New York State, Struck Down in West Virginia</u>. *Marten Law Envtl. News* (Apr. 10, 2012).

Orford, A. <u>Let It Snow</u>, <u>Let It Snow</u> - <u>Ninth Circuit Decisions Show Why Meeting the Merits in NEPA Challenges May Be Better Than Fighting the Process</u>. *Marten Law Envtl. News* (Mar. 19, 2012).

Prugh, R. & Orford, A. <u>Closely Watched Sackett Case Argued in Supreme Court</u>. *Marten Law Envtl. News* (Jan. 17, 2012).

Orford, A. <u>U.S. Supreme Court Reiterates Deference Given EPA Pesticide Decisions</u>. *Marten Law Envtl. News* (July 13, 2011).

MacDougal, D. & Orford, A. The Klamath Adjudication: Will It Ever End? Marten Law Envtl. News (July 7, 2011).

Orford, A. <u>Maine Supreme Court Decision In Line With Trend Rejecting Informal Agency Decision-Making</u>. *Marten Law Envtl. News* (May 12, 2011).

Orford, A. California's Cap and Trade Program Set Back by Injunction. Marten Law Envtl. News (Mar. 23, 2011).

Orford, A. <u>EPA Draft Plan to Study Potential Drinking Water Impacts of Hydraulic Fracturing Intensifies National Debate on Natural Gas Drilling</u>. *Marten Law Envtl. News* (Feb. 25, 2011).

Orford, A. <u>District Court Rules CERCLA § 104(e) Letter Triggers Duty to Defend in Oregon</u>. *Marten Law Envtl. News* (Nov. 19, 2010).

Orford, A. <u>Construction Begins on Pipeline to Bring Rocky Mountain Gas to West Coast; Legal Challenges Linger</u>. *Marten Law Envtl. News* (Oct. 22, 2010).

Orford, A. Fractured: The Road to the New EPA "Fracking" Study. Marten Law Envtl. News (Sept. 17, 2010).

Brandt-Erichsen, S. and Orford, A. <u>House Enacts Amendments to Oil Pollution Act, Outer Continental Shelf Lands Act; Measure Awaits Senate Action</u>. *Marten Law Envtl. News* (Aug. 2, 2010)

Orford, A. <u>Of Boiler Rules and Biofuels: Biomass Energy Faces New Emissions Restrictions, Regulation Under Waste Laws</u>. *Marten Law Envtl. News* (July 22, 2010)

Orford, A. <u>Responding to Limits on Greenhouse Gas Emissions: Three Questions for Companies in the Electric Power Sector</u> (May 26, 2010).

Orford, A. <u>District Court Applies BNSF Arranger Liability Test</u>, <u>Dismisses CERCLA Claim Against Dry Cleaning Machine Manufacturers</u>. *Marten Law Envtl. News* (Apr. 1, 2010)

Orford, A. Oregon Legislature Limits Energy Tax Credits, But Leaves Program Intact. Marten Law Envtl. News (Mar. 18, 2010).

Orford, A. <u>EPA Announces Plans to Require Financial Assurance Under CERCLA for Chemical, Refining and Electrical Industries</u>. *Marten Law Envtl. News* (Jan. 20, 2010).

Dotten, M. Brandt-Erichsen, S., Orford, A. <u>The Year Ahead in Energy and Environmental Law: Energy</u>. *Marten Law Envtl. News* (Jan. 14, 2010).

Orford, A. <u>Break on Through: Tenth Circuit Allows Non-Settling PRP To Intervene in CERCLA Settlement Proceedings</u>. *Marten Law Envtl. News* (Dec. 23, 2009).

Dotten, M., Orford, A., Till, D. <u>Portland, Oregon Releases Aggressive Municipal Climate Plan</u>. *Marten Law Envtl. News* (Dec. 2, 2009).