

Energy Law

**L8452
Columbia Law School
Fall 2012**

Prof. Michael B. Gerrard

Class hours: Tuesday, 4:20 pm - 6:10 pm
Classroom: Jerome Greene Hall Room 105
Two credit hours

Instructor's office: JGH 517

Office hours: Tuesday and Thursday, 10:45 a.m. - 12:00 p.m. or by appointment

Contact michael.gerrard@law.columbia.edu for appointment

This course concerns the regulation of energy, energy resources, and energy facilities. Among the topics will be the regulation of rates and services; the roles of the Federal Energy Regulatory Commission and the state public utility commissions; and the interaction with environmental law. Attention will be devoted to energy resources (such as oil, natural gas and coal) and to generating, transmission and distribution facilities. The current and future roles of renewable energy, energy efficiency, and nuclear energy will receive special attention, as will the regulation and deregulation of electricity. Though there is some discussion of international issues, the focus is on U.S. law and policy.

Course grades will be based on a final exam, but they may be adjusted up or down a notch to reflect the quality of class participation. The final exam will be open book and will consist of a series of essay questions, most or which will require applying the law covered in the course to specified factual situations.

Additional materials or problem exercises may be assigned during the course of the semester, primarily as a result of recent developments. In that event, they will be posted on Courseweb.

Columbia University is dedicated to facilitating equal access for students with disabilities and to cultivating a campus culture that is sensitive and responsive to the needs of students. To request an accommodation for a disability during the course, students are welcome to reach out to the Office of Disability Services, to the Academic Counselors in Student Services, or to the instructor. (In general, students may decide whether or not to inform their professors of any accommodations, as they prefer. But note that individual exam arrangements are generally not discussed with the professor.)

Readings

Joseph P. Tomain and Richard D. Cudahy, Energy Law (Thomson/West Nutshell Series, 2011 edition). Readings from this text are designated as “Tomain”.

Michael B. Gerrard, ed., The Law of Clean Energy: Efficiency and Renewables (American Bar Association 2011). Readings from this text are designated as “Gerrard”.

There are additional readings for many sessions; they are all provided in the Coursepack that is available for purchase in the Columbia University bookstore, and most but not all can be found on-line.

Class Topics and Readings

VOLUME I

Class 1 -- September, 2012

Basic energy facts

Gerrard, Chapter 1

Timothy E. Wirth, C. Boyden Gray & John D. Podesta, “The Future of Energy Policy,” Foreign Affairs, July/August 2003, pp. 133-155.....7

Carl E. Behrens & Carol Glover, *U.S. Energy: Overview and Key Statistics* (Congressional Research Service, April 11, 2012).....32

Class 2 -- September 11, 2012

Basics of rate regulation

Franklin D. Roosevelt, “A Campaign Address on Public Utilities and Development of Hydro-Electric Power,” Portland, Oregon, September 21, 1932.....72

Tomain, pp. 10-51

Massachusetts Institute of Technology, *The Future of the Electric Grid*, pp. 175-194, 235-240 (2011).....82

Class 3 -- September 18, 2012

Rate regulation procedures

Tomain, pp. 165-204

Regulatory Assistance Project, *Electricity Regulation in the U.S.: A Guide*, pp. 9-57 (March 2011).....110

Guest speaker/in-class exercise (Judge Eleanor Stein)

Additional readings to be posted on Courseweb

Class 4 -- September 25, 2012
Federal/state jurisdiction

Tomain, pp. 140-161

Gerrard, Chapter 22

Frank R. Lindh, "Federal Preemption of State Regulation in the Field of Electricity and Natural Gas: A Supreme Court Chronicle," 10 Energy L.J. 277 (1989).....160

Connecticut Department of Public Utility Control v. Federal Energy Regulatory Commission, 569 F.3d 477 (D.C. Cir. 2009) (first seven pages only).....198

Piedmont Environmental Council v. Federal Energy Regulatory Commission, 558 F.3d 304 (4th Cir. 2009) (excerpts).....205

Class 5 -- October 2, 2012
Natural Gas

Tomain, pp. 269-315

Massachusetts Institute of Technology, The Future of Natural Gas: An Interdisciplinary MIT Study (2010), pp. 1-72.....220

Bentek Energy, "The Williston Basin: Greasing the Gears for Growth in North Dakota," pp. 6-17 (North American Natural Gas Market Overview) (2012).....285

Guest speaker: Mitchell Hertz (Kirkland & Ellis)

Class 6 -- October 9, 2012
New sources of natural gas: Shale formations

Secretary of Energy Advisory Board, Shale Gas Production Subcommittee 90-Day Report (August 18, 2011), pp. 1-33.....297

International Energy Agency, *Golden Rules for a Golden Age of Gas*, pp. 9-14 (2012).....331

Deyi Hou, Jian Luo & Abir Al-Tabbaa, "Shale gas can be a double-edged sword for climate change," 2 Nature Climate Change 385 (June 2012).....338

From The New York Times:

Ian Urbina, "Pressure Limits Efforts to Police Drilling for Gas," March 3, 2011.....341

Ian Urbina, “Insiders Sound an Alarm Amid a Natural Gas Rush,” June 25, 2011.....	349
Ian Urbina, “Behind Veneer, Doubt on Future of Natural Gas,” June 26, 2011.....	356
Arthur S. Brisbane, “Clashing Views on the Future of Natural Gas,” July 16, 2011.....	361
Ian Urbina, “Rush to Drill for Natural Gas Creates Conflicts With Mortgages,” October 19, 2011.....	364
Joe Nocera, “How to Extract Gas Responsibly,” February 27, 2012.....	370
Joe Nocera, “About My Support for Natural Gas,” April 15, 2012.....	372
Jody Freeman, “The Wise Way to Regulate Gas Drilling,” July 5, 2012.....	374
Arthur Riley, “Shale Gas to the Climate Rescue,” August 13, 2012.....	376
From Council on Foreign Relations:	
Michael Levi, “Some Thoughts on the Howarth Shale Gas Paper,” April 15, 2011.....	379
Michael Levi, “Is Shale Gas a Ponzi Scheme?” June 27, 2011.....	382
Steve Everley, “Misinformation Campaign Targets Hydraulic Fracturing,” Washington Legal Foundation, July 13, 2012.....	387

VOLUME II

Class 7 -- October 16, 2012

Oil

Tomain, pp. 218-259

Michael J. Graetz, “Energy Policy: Past or Prologue?” *Daedalus*, pp. 31-44 (Spring 2012).....7

Michael A. Levi, “The Canadian Oil Sands: Energy Security vs. Climate Change,” Council on Foreign Relations, May 2009.....21

Paul W. Parfomak et al., “Keystone XL Pipeline Project: Key Issues,” Congressional Research Service, May 9, 2012.....61

Class 8 -- October 23, 2012

Electricity Regulation

Michael H. Brown & Richard P. Sedano, Electricity Transmission: A Primer (National Council on Electricity Policy, 2004), pp. 1 – 38.....94

Tomain, pp. 369-408

Gerrard, chapter 9

Class 9 -- October 30, 2012
Electricity Capacity Markets

Tomain, pp. 408-425

Guest speaker (Robert Grey, General Counsel, PPL)

Additional readings to be posted on Courseweb

Class 10 -- November 6, 2012
Nuclear power

Tomain, pp. 426-469

Massachusetts Institute of Technology, “The Future of Nuclear Power” (2003), Executive Summary (pp. ix-x) and Chapter 1 (pp. 1-16).....133

Massachusetts Institute of Technology, “The Future of the Nuclear Fuel Cycle” (2010) (Executive Summary).....152

Lucas W. Davis, “Prospects for Nuclear Power,” 26 *Journal of Economic Perspectives* 49 (2012).....159

Oliver Morton, “Special Report on Nuclear Energy: The dream that failed,” *The Economist* (March 10, 2012).....174

Class 11 -- November 13, 2012
Energy efficiency

Gerrard, chapters 2 and 3

McKinsey Global Energy and Materials, Unlocking Energy Efficiency in the U.S. Economy (July 2009), Executive Summary.....189

Massachusetts Institute of Technology, *The Future of the Electric Grid*, pp. 143-170 (2011).....202

Amanda R. Carrico *et al.*, *Energy and Climate Change: Key Lessons for Implementing the Behavioral Wedge*, 2 *Journal of Energy & Environmental Law* 61 (2011).....230

Class 12 -- November 20, 2012
Renewables

Intergovernmental Panel on Climate Change, *Special Report Renewable Energy Sources: Summary for Policy Makers*, May 9, 2011, pp. 1-25.....237

David Fridley, “Nine Challenges of Alternative Energy,” in Richard Heinberg & Daniel Lerch, eds., The Post Carbon Reader (University of California Press, 2010).....262

Gerrard, chapter 16

Class 13 -- November 27, 2012
Integrated resource planning

Geoffrey Heal, “The Economics of Renewable Energy” (National Bureau of Economic Research, June 2009).....274

Synapse Energy Economics, Inc., Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers (2003), pp. ES-1 to ES-7.....303

Tennessee Valley Authority, *Integrated Resource Plan: TVA’s Environmental & Energy Future* (March 2011) (excerpts).....311

Class 14 -- December 4, 2012
Pricing for Renewables: Renewable portfolio standards, feed-in tariffs, carbon tax

Gerrard, chapter 4

Karlynn Cory et al., “Feed-in Tariff Policy: Design, Implementation, and RPS Policy Interactions,” National Renewable Energy Laboratory, March 2009.....340

Richard J. Pierce, Jr., “The Past, Present, and Future of Energy Regulation,” 31 Utah Env. L. Rev. 291 (2011).....354

Vaclav Smil, “Global Energy: The Latest Infatuations,” 99 American Scientist 212 (May-June 2011).....371