ENGLISH LAW & POLICY
Law 270.6
Professor Sierra Martinez
Fall 2016

CONTACT INFO
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COURSE SCHEDULE
Meetings: Tuesdays 3:35-6:15pm
Location: Room 140
Summary Class Monday, December 5, 3:35-6:15pm, Room 140
Credit: Three hours

COURSE REQUIREMENTS
Read the required materials.
Participate in class discussions and presentation. Classroom activity will account for 25% of your grade.
Complete the in-class presentation. Accounts for 15% of your grade.
Write the final take-home exam. Accounts for 60% of your grade.
Prerequisites: None

COURSES MATERIALS
Additional materials: As provided below in the syllabus; all publicly available on the internet.

COURSE DESCRIPTION
Energy production and use drive the world’s economies and offer hope for growth and prosperity. Yet, the extraction and use of fuels and the development of energy facilities are among the greatest threats to the global environment. This course introduces students to the legal, economic, and structural issues that both shape our energy practices and provide opportunities to overcome these critical problems. The course focuses primarily on the regulation and design of electricity systems and markets, since so many energy choices—the use of oil, natural gas, coal, nuclear, the green alternatives such as solar, wind, and energy conservation or “demand side management”—relate to the way we generate or deliver electricity, or avoid the need to do so. Next to the use of petroleum for transportation, electric generation is the greatest contributor to air pollution and the greatest source of greenhouse gas emissions. As traditional energy paradigms face competitive pressures from new energy innovations, such as the expanded use of energy storage or the shifting of transportation energy needs into the electric sector, we see increased challenges in managing and building our energy infrastructure, but also new opportunities to combat environmental problems compounded from previous generations.

The course examines both the traditional monopoly model of regulation and evolving competitive alternatives. The course exposes students to energy resource planning, pollution management, rate design,
green markets, energy efficiency, demand side management, renewable energy portfolios, climate change, and carbon management. The course provides an introduction to administrative law, federalism, and to practical issues in the field.

LEARNING OUTCOMES
Students in the course will be expected to achieve the following Berkeley Law Learning Outcomes:

- Knowledge and understanding of substantive and procedural law
- Legal analysis and reasoning, legal research, problem-solving, and written and oral communication in the legal context
- Using the law to solve real-world problems and to create a more just society

After completing this course, students should be able

- To describe the historical developments of energy policy in the United States
- To identify and explain the rules and principles that define the relationship between state and federal authority over energy—and how it differs based on the type of energy resources in question
- To find state and federal energy statutes and create persuasive arguments in favor or opposition of passing, based on the interests of a hypothetical client
- To assess the strengths and weaknesses of different mechanisms to regulate electric utilities to achieve a public interest
- Analyze fact patterns with possible federalism, Dormant Commerce Clause, Supremacy Clause, Takings, or administrative procedure issues
- Identify and discuss issues of economic efficiency, equity, environmental costs, and other externalities as they relate to policies regulating electric utilities
- Discuss the function of cost of service ratemaking and identify impacts to various energy resources of different rate designs
- To advocate, in a fact-based manner, for an energy policy that improves your client’s interests while at the same time is compromised enough to be politically viable

GRADING & EVALUATION
Students will be evaluated in the following areas:

Class participation 25%
In-class presentation 15%
Final exam 60%

Class Participation & Hot Topics
Class participation makes this course richer, and importantly: is a benefit to your classmates. If you have a question, it is very likely that your classmates will benefit from hearing further explanation and exploration of the issue. Contributing meaningfully will increase your grade, and not contributing will decrease your grade. Students will be on panel every fourth class; while on panel, students will be expected to be called upon to comment on and answer questions about the reading materials. However, for the first and last classes, the whole class will be on panel.

Like the practice of law, being present—physically and mentally—is a critical component of success. (Or in the classic words of Woody Allen: “80% of success is showing up.”) Therefore, I will take into account attendance in considering the class participation portion of your grade.

The field of energy is constantly evolving. In order to keep pace with this rapid transformation, as well as to bring home some of the theory we cover in the course, we will begin each class with 5 minutes
discussion of current events. These will be volunteered by any and all students; this is an easy way to participate in class. The U.S. Energy Information Administration’s “Today in Energy”, and checking state agency news dockets (e.g., the California Energy Commission’s) are great sources for current events in the field of energy.

You will also have the opportunity to participate in class through class discussions, role-playing exercises, and generally you are welcome to ask questions at any time in class, (although I may defer discussion on any particular question). If you expect to have difficulty participating in class, please talk to me during office hours or contact me by phone or email. I want to make sure you can feel comfortable participating and learning.

Class Presentations
Each student will be responsible for individually developing and leading a fifteen-minute presentation (ten minutes of presentation and five minutes of Q&A or leading a discussion) on one case study. Students will sign-up during the first day of class for their desired date. Presentations will begin on the fourth class and extend through the fourteenth. Therefore, we will have roughly two student presentations every class. Because we want an even spread of presentations throughout the semester, and to counteract the incentive against presenting early, students that sign-up for the earliest dates get to pick first which law/regulation they will present on. Once a law/regulation is selected, it is unavailable for other students to select it or present on it.

The presentation should inform the class of the relevant issues at hand, delve into what explains the politics behind the issue, the legal considerations, and recommend how policy makers can influence the final result. Preparation for presentations includes reading the material in-depth, taking time to synthesize the issues, and consider your fellow audience members—what do they know, what is most important for them to know? Which questions will spark a useful conversation that helps lead to insights and general principles that can be used in the future? If you use slides, please email them to me the Friday before your presentation, by 5:00pm.

By Friday, August 26 at 5:00pm, please email me your top five choices for presentation topic, in ranked order. By Class 2, Tuesday Aug 30, I will finalize the schedule of student presentations.

I will provide a list of possible cases studies to present on, or you can choose your own. The case study must be a live or recently-decided energy issue before a government agency. It should relate to one of the topics in the syllabus below. Most importantly, it should be something that piques your interest. E.g., it could be a power plant licensing/re-licensing/retirement, funding for an energy resource program/RD&D, legislative mandate on energy producers/commission/agency, change in energy organizations operations, or agency plans for future energy development. Please select from a pending or passed bill from state, municipal, or federal legislative body, or regulation from state or federal agency. I recommend the following order of operations: First, research the issue you are interested in; then, identify pending or recent decisions surrounding that issue; last, go to the relevant government website to obtain the most updated version of the law/policy. Not the other way around.

- Present the facts of your case study
- Walk the class through the relevant issues
- Present a position in favor or against the major issue
- Identify political considerations and interests
- Identify implementation efforts required
- Identify cost and benefits – how much, allocated to whom?

Final Exam
The final exam will be a take-home test. It is open book and open note. However, it is not open internet; that is, no access to internet.

COURSE POLICIES
You may use a laptop or other device to access reading assignments during class. However, I strongly encourage you to take hand-written notes. Research shows that we all absorb information better this way. Out of respect for your peers, all devices must be put away during student presentations and role-playing exercises.

COURSE OUTLINE

UNIT 1: INTRODUCTION

Aug 23 (Class 1): Introduction to the class and to energy systems.
Overview of electricity and energy systems. Introduction to the basic physical components of the electric grid: generation, transmission, distribution, ancillary services, and reliability. Familiarity with energy companies, utilities, and government agencies. Preface to entire course.

READING:
- EE&E pp. 1-27 (Ch1, Section A: Importance of Energy, Section B: Themes in Energy Law)
- California Council on Science and Technology: California’s Energy Future – The View to 2050, pp. 1-5, pp. 31-36: Introduction, Key Findings, The 2050 Energy System Portraits
  Note the rapidly changing energy supply mix – electric generation from non-hydro renewables now exceeds that of all hydro generation; all renewable energy exceeds that of nuclear energy.
- EE&E pp. 29-37 (Ch. 2, Section A, Part 1: Historical Development of Electric utility)
- EE&E pp. 66-76 (Ch. 2, Section B: An Overview of the electric Power industry)

Optional:
EE&E pp. 89-93 (Ch. 3, Section A: Evolution of Modern Coal Industry)
EE&E pp. 128-130 (Ch.3, Section C: Future of Coal)

UNIT 2: FUNDAMENTALS OF ENERGY LAW AND POLICY

Economics and regulation, market theory, market failure, regulatory lifecycle and failure.
Periods of national energy policy: Pre-energy law, FDR and the regulatory state, shadows of Carter and Reagan, burgeoning clean energy model.
Regulating electric monopolies as public utilities, duty to serve, regulatory compact, public interest in price regulation
READING:

- EE&E pp. 60-65 (Ch.2, Section A, Part 1: Historical, Sub-Part C: Brief Economic Perspective on Monopoly)
  Note that this model of national energy policy was cemented in 1990. How has the energy landscape changed since? Will the next phase of national energy policy reflect the past?
- EE&E pp. 37-59 (Ch. 2, Section A, Part 2: Treat Electric Power as Public Utility)

  *Tripp v. Frank*
  *Charles River Bridge*
  *Munn v Illinois*

Sep 6 (Class 3): Administrative Law and Energy Regulation

Agencies: The modern American legal institution, Administrative Procedure Act, reasoned decisionmaking, judicial review, standard of review, the administrative record.
Federal and state regulatory bodies, constitutional limits, requirements pertaining to regulation.

READING:


Sep 13 (Class 4): Regulation of Transmission and Regional Grids

Natural gas regulation as precursor, federal regulation of electricity, federalism, state jurisdiction, Federal Power Act, retail rate v. wholesale, jurisdiction over co-mingled electricity
Electric transmission, open access, regionalization of bulk power grid
Student presentations begin: 2-3 per class through the rest of semester

READING:
- EE&E pp. 77-86 (Ch. 2, Section C: The Rise of Electric Power Regulation) *Attleboro* (prohibiting states from regulating interstate electricity sales)
- EE&E pp. 508-515 (Ch. 8, Section D: Jurisdictional Issues)
  - *FPC v. SoCal Edison*
  - *FPC v. Florida Power & Light*
  - *FPC v. Conway*
- EE&E pp. 640-642 (Ch.10, Section B3: Expansion of FERC’s Authority Over Transmission)
  - pp. 642-649 (Ch.10, Section C: Open Access Transmission - Order 888)
  - pp.651-660 (Ch.10, Section C, Part 2: Rise of Regional Transmission)
  - FERC Order 2000

UNIT 3: ELECTRICITY REGULATION

Sep 20 (Class 5): Cost-of-Service Regulation and Rate Design
Cost of service regulation, end results, prudence v. used and useful, takings, stranded costs. Ratemaking: goals, formula, and considerations, cost-benefit analysis, rate design options
*Guest Lecturer Bob Levin, California Public Utilities Commission

READING:
- EE&E pp. 455-460 (Ch.8, Section A: Overview of Rates – Cost-of-Service)
- EE&E pp. 460-495 (Ch.8, Section B: Legal Issues in Cost-of-Service Regulation)
  - *Smyth v Ames*
  - Bluefield water works v PSC
  - *FPC v. Hope Natural Gas Co.*
  - *Jersey Central Power & Light Co. v. FERC*
  - *Duquesne Light Co. v. Barasch*
- EE&E pp. 500-508 (Ch. 8, Section C: Alternatives to Cost-of-Service Regulation)
- EE&E pp. 907-908 (Ch. 13, Section C, Part 1(a): Dynamic Pricing)

What are “munis?” In what ways are they the same as investor-owned utilities? How are munis able to provide lower rates?
- EE&E pp. 909-912 (Ch. 13, Section C, Part 1(a): Dynamic Pricing)
In the Matter of Application of Baltimore G&E, Case 9208

Sep 27 (Class 6): Deregulation and retail competition
  Competition and alternatives to monopoly provider, independent power producers, community choice aggregators, PURPA, revisiting contract price, filed rate doctrine
  California Electricity Crisis
  *Guest Lecturer: Alex Makler, Western Director, Calpine [Boalt alum]

READING:
  ➢ EE&E pp. 520-525 (Ch.8, Section D, Part 3: Regulation v. Filed Rate Doctrine)
    Mobile-Sierra Doctrine
    San Diego v. FERC (1990)
  ➢ EE&E pp. 671-698 (Ch.10, Part D: Operations and Governance of Wholesale Markets)
    Morgan Stanley v. PU District No.1 of Snohomish (2008)
  ➢ EE&E pp. 699-708,719 (Ch.10, Part E: Retail Competition in Electric Power)
    Stranded Costs
    pp. 625-638 (Ch.10, Section A: Competition in Power Markets)

Oct 4 (Class 7): Integrated Resource Planning
  Portfolio management, demand forecasting, integrated resource plans, need determinations, reliability studies
  Exercise: Mock Hearing on Resource Need Determination. Witnesses and attorneys from various parties: enviro, consumer advocate, IOUs, CCA, environmental justice, independent power producer, California ISO, storage.

READING
UNIT 4: LOW CARBON ENERGY RESOURCE POLICIES

Oct 11 (Class 8): Nuclear Energy

Industry and regulatory overview, plant cancellations and retirements, future of nuclear energy in a carbon-constrained world, bans and requirements on nuclear power

Exercise: Diablo Canyon retirement negotiation. Stakeholder group for peace, environmentalist against nuclear, environmentalist for nuclear, regulators, utility lawyers, and consumer advocates.

READING:
- EE&E, pp. 395-419 (Ch. 7, Section A: Background on Nuclear Energy
  Section B: Nuclear Safety and Risks, PG&E v. CEC
  pp. 420-426, 428-434, Section C: Regulating Nuclear Power Plants


Oct 18 (Class 9): Renewables


Guest Lecturer: Matt Friedman, Senior Attorney, The Utility Reform Network.

READING:
- EE&E, pp.727-448 (Ch.11, Sections A&B: Intro & Understanding Renewable Energy)
- EE&E pp. 751-755 (Ch.11, Section C, Part 1(a)(ii): Feed-In Tariffs
- EE&E pp. 758-783 (Ch.11, Section C, Part 1b: Mandating Renewable Gen, RPS
  Rocky Mountain Farmers Union v Corey
  North Dakota v. Heydinger
Oct 25 (Class 10): Energy Efficiency

Energy waste, technologies, programs, history, decoupling, incentive mechanism, cost-effectiveness tests, jobs, impacts on disadvantaged communities, recovery of program costs, incentives outside of ratebase

READING:
- EE&E, pp: 869-897 (Ch. 13, Sections A: Introduction & Section B: Regulatory Responses)

Nov 1 (Class 11): Demand Response

DR as an energy resource, potential studies, participation in wholesale markets, programs
*Guest Lecturer: Mona Tierney-Lloyd, Regulatory Affairs Director, EnerNOC, Inc.

READING:
- EE&E, pp. 921-934 (Ch.13, Section C, Part 3: Smart Grid: Demand Response)
  - EPSA v FERC – Reversed!
  - FERC Order 745

Nov 8 (Class 12): Hydropower and the Energy-Water Nexus

Competition among enviro considerations, history, Federal Power Act Part 1, PURPA, EPCA, water-energy efficiency, pumped storage, desalination.

READING:
- EE&E pp. 345-350 (Ch. 6, Section A: Water as Source of Energy)
- EE&E pp. 351-356 (Ch. 6, Section B: Public v. Private Power)
  - Udall v. FPC (1967)
- EE&E pp. 382-393 (Ch. 6, Section D: Changing Landscape of Hydro Development, Subsection 2: Relicensing & the Environment
  - Subsection 3: Hydrokinetic Project Development,
  - Subsection 4: Competition With Other Renewables
  - Section E: Future of Hydro)
- NRDC, Proceeding With Caution 2: California’s Drought and Desalination in Context
UNIT 5: ON THE FRONTIER

Nov 15 (Class 13): Future Grid
Energy storage, flexible capacity, grid parity, fuel cells, self-generation incentives
*Guest Lecturer: Janice Lin, Energy Storage Alliance, Founder & CEO
Transportation energy, biofuels, Low Carbon Fuel Standard, electrification, smart growth, transportation efficiency
*Guest Lecturer: Max Baumhefner, Transportation Attorney, Natural Resources Defense Council [Boalt alum]

READING:
- EE&E pp 1003-1013, (Ch. 15, Sections A & B: Transportation Economy & Evolution
- EE&E pp. 1023-1041 (Ch. 15, Section D: Biofuels)
- EE&E pp. 1041-1057 (Ch. 15, Section E: Motor Vehicle Energy Efficiency)


Nov 22 (Class 14): Carbon Markets and Energy Impacts
Recap of future grid class, and reading materials.
Emissions trading programs: AB 32 & RGGI, leakage, resource shuffling, prices and government revenues, carbon influence on energy policies, Clean Power Plan, climate regulatory risks and failures
*Guest Lecturer: Craig Segal, Air Resources Board, Counsel in Executive Office

READING:
- EEFE, pp. 290-319 (Ch. 5, Section D: Regulating Greenhouse Gas Emissions Under the Clean Air Act)
- Massachusetts v. EPA (2007)
- Utility Air Regulator Group v. EPA (2014)
- Proposed CPP Rule (2014) (superseded by Final Rule)

