ENERGY REGULATION AND THE ENVIRONMENT

**Law 270.6**

**Spring 2014**

**Tuesdays and Thursdays**

**11:20 am to 12:35 pm**

**Room 134**

**Lecturer: Steven Weissman**

## Office : 358 Boalt Hall

Office Hours: Tuesday 2-4 pm

Phone: 510/642-0508

Email: sweissman@law.berkeley.edu

**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, 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. In addition, as urban and suburban development spread across the land, the maintenance and expansion of the electric transmission grid provide increasingly challenging land use problems.

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 and to practice issues in the field.

The course is for three units.

This syllabus was originally developed in collaboration with the Institute for Energy and the Environment at Vermont Law School.

**The first two assigments:**

**Class 1 (January 7**): **Introduction** **to the** **course**, including the history of energy, the relationship between energy and development, environmental and environmental justice impacts of energy generation, and an introduction to current energy issues.

* <http://www.epa.gov/cleanenergy/energy-and-you/affect/index.html>. Click and thoroughly read the description of environmental impacts related to each fuel type. (Which fuel sources pose the greatest threat to air quality? Water quality? The climate?)

**Class 2 (January 9**)

**Introduction to Electricity.** An introduction to the basics of generation, transmission and distribution, efficiency, reliability, and ancillary services.

* Ferrey, *Inverting Choice of Law in the Wired Universe: Thermodynamic, Mass, and Energy,* 45 William and Mary Law Review 1842 <http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1337&context=wmlr> at **pp. 1910-1914, “E=MC2” [summary of physical nature of electricity]**. *Also available in abridged form on bCourses.* Make sure to read the accompanying footnotes. (What is the physical nature of an electric current? Is it a good or a service?) **5**
* National Council on Electricity Policy, *Electricity Transmission, A Primer* (2004) (“*Transmission Primer”*), p. 2 (the first subsection under “A Quick History”, called *Growth of the Transmission System*); Ch. 4, “Physical and Technical Aspects of Transmission”, **pp.29-38; Appendix – read just pp.50-53 (top 3 paragraphs)**. *Note: There is Glossary starting at p.59 that you might find helpful for future reference*. <http://raponline.org/document/download/id/812> (What are the major components of the electric grid? How does it work? Can specific current be delivered from Point A to Point B? Is the grid a single machine, or is it many?) **13**