

Spring 2016 Syllabus

FINA 7A97 Regulatory Environment and Risks to Energy

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1.5 hours of credit (in certain circumstances additional credit could be added with longer paper and independent study). Your grade is based on classroom participation and your final writing project.

Energy extraction and utilization is heavily regulated, at both the federal and state levels. Some times (as in “fracturing”) there have been attempts by local government to interact with energy extraction or utilization as well. With renewed attention on climate change, other significant air pollution, and water resources, this regulation has been increasing, and will continue to increase. Therefore, anyone in either the upstream or downstream business of energy or energy regulation needs to be aware of the impacts of such regulation and economic risks of these current regulations as well as the possibility of future regulation, in order to make effective business allocation decisions. This class explores the known and likely future environmentally related regulatory risks, and examines the likely impacts of such regulation on the energy business.

Readings are mostly posted on blackboard and you are responsible for reading and bringing copy to class for discussion; Additionally, we will discuss your paper topics during each of the last 4 classes. Grade is based on class participation and one writing project, due one week after the final class. The writing project is a minimum 10 page case study or memorandum concerning the economic impact posed by a specific environmental or health based law (or proposed law) to a sector of the energy business. Topics will be selected in meetings with the professor . Law students and MBA (and other graduate students) will be graded separately.

Class meets on Tuesdays for first half of the semester, from, 4:30 to 7:15, class meetings: Jan. 19, Jan. 26, Feb. 2, Feb. 9, Feb. 16, Feb. 23, and March 1.

Week 1 –

What is Energy Business? energy extraction, energy distribution, and electricity production and delivery: from fossil fuels to renewables;

What is Regulatory Risk? laws governing extraction, formulation, distribution, and electricity

The special case of Energy Markets: oil and gas markets, renewable energy markets, futures, and hedging.

Assignment: Pirrong, Market Oversight for Cap and Trade (on blackboard); read Exxon Mobil report on risk factors (<http://corporate.exxonmobil.com/en/environment/climate-change/managing-climate-change-risks/risk-factors>)

Week 2

The regulatory state: the law of regulatory agencies (administrative law); federal and state relations.

Summary of applicable laws and regulations by energy sector:

- 1) **energy extraction:** Surface Mining Reclamation and Control Act, wetlands/clean water act regulation and EPA veto power, Outer Continental Shelf Lands Act, National Forest Management Act, Endangered Species Act, Marine Mammal Protection Act, National Environmental Policy Act (NEPA)
- 2) **fuel transportation:** pipeline regulation, rail delivery regulation, Emergency Planning and Community Right to Know Act (EPCRA)
- 3) **refining and electricity production from fossil fuels:** Clean Air Act controls (conventional and hazardous air pollutants and greenhouse gases); new climate legislation? International movements in climate change
- 4) **The electricity delivery market:** connection to the grid (FERC), state renewable energy portfolio standards, state public utility commissions, Clean Air Act climate change, California climate change law, Regional Greenhouse Gas Initiative RGGI, regulated vs. de-regulated electric markets; distribution and “smart metering”
- 5) **special case of fracturing:** water quantity, groundwater regulation, RCRA regulation, state and local land use controls, Clean Air Act (climate) control on release of methane
- 6) **Exports:** LNG exports, oil exports

Assignment: Klass et al., Introduction, Energy Law and Policy – Legal Controls on Energy (on blackboard); Flatt, et al., Brief description of administrative law (on blackboard*); Flatt, Adapting Energy and Environmental Law for Climate Change, 11 Vermont J. Env'tl. L. (on blackboard)

Various statutory texts handed out and discussed in class

[THIS WILL ASSIST IN YOUR PAPER TOPIC SELECTION]

Week 3

Existing and Emerging Risks from Health Based Regulation

- 1) Clean Air Act health based provisions – criteria pollutant control, air toxics pollution control
- 2) Clean Water Act health based provisions – heat pollution, other conventional pollutants, toxic pollutants
- 3) Mining Health and Safety
- 4) Accident Avoidance – RCRA, Transportation, Pipelines, Emergency Planning Laws

Is coal dead? Whither coal ash? Oil's future?

Assignment: *N.C. v. EPA*, excerpt (on blackboard*); Mercury regulation case excerpt (on blackboard*); Pipeline Safety Improvement Act of 2002 article (on blackboard); Oil sands article Part III (on blackboard); Summary of Blankenship indictment (Massey Coal) (on blackboard*)

Week 4

Existing and Emerging Risks from Environmentally Based Resource Regulation

- 1) Outer Continental Shelf Lands Act
- 2) NEPA
- 3) Endangered Species Act, Marine Mammal Protection Act
- 4) Federal Lands Resource Laws and Policies
- 5) Renewable Incentives and Renewable Portfolio Stds.

Will there ever be offshore oil or gas production in Alaska?

Market Responses to the ESA

Assignment: *Native Village of Point Hope v. Shell* excerpt (on blackboard); Arctic Drilling E&E article (on blackboard) Govt Incentives in CE Technology During Recession article excerpt (on blackboard);

Week 5

Existing and Emerging Risks from Climate Change

- 1) Climate Change Laws – CAA; proposed climate mitigation legislation, international responses
- 2) Climate Change – infrastructure threats, collateral damage and risk from other laws
- 3) Climate Change – Water availability
- 4) NEPA and recognition of climate change
- 5) Biofuels law and regulation

Assignment: Murray et al., Nicholas Institute, EPA Clean Air Act GHG plan (on blackboard); Monast and Tarr, Nicholas Institute, EPA CAA GHG (on blackboard); reread Section V, of Flatt, *Adapting Energy and Environmental Policy for Climate Change* from week 1 (on blackboard); *API v. EPA* excerpt (biofuels case) (on blackboard); biofuels article (on blackboard)

Week 6-

EPA's Clean Power Plan; Electricity regulation (here comes the state) - public utility commissions, public interest, transmission, property issues; distributed and smart electricity; the role of FERC

Week 7

The Special Case of Fracturing:

Natural Gas: Fracturing regulation (CWA, water quantity, RCRA, local and state land use controls); transport and pipelines export

What will happen to energy demand?

Assignment: Electricity, Law, Policy and Regulation, 25 *Natural Resources Law Journal* (on blackboard*); Flatt and Payne, *Curtailment First* (on blackboard); E&E article on electricity demand (on blackboard*)