Three Essentials of the Electric Grid: Legal Essentials SYLLABUS

Vermont Law School Summer Session, Term 1
Three Essentials of the Electric Grid: Legal Essentials (ENV5512)

Class sessions: June 12-15, 2023, 9:00am-12:00pm ET (includes 15-min break each day)

Class location: Nina Thomas Room, 1st floor Debevoise Hall (class Teams channel here)

Instructor:

Samantha Williams
Midwest Director, Climate & Clean Energy Program
Natural Resources Defense Council

Email: swilliams@nrdc.org; sawilliams@vermontlaw.edu

Cell: 415-533-2060

Office Hours:

Location: 208 Eaton House

Time: Mon-Wed, 2:30-3:30pm ET Also available on Teams chat or email

Course Overview:

This one-credit course is a module in *Three Essentials of the Electric Grid*, a three-part overview of the business, engineering, and law and policy dimensions of the U.S. electricity grid.

With the rise in urgency to address the climate crisis, the US will need to sharply reduce greenhouse gas emissions and transition to a carbon-free economy. This legal essentials module will examine the transition in the electric power sector, exploring in practice how the power of law and policy can be brought to bear through clean energy advocacy to make much-needed progress on tackling the climate crisis. Through classroom discussion and exercises, this course will: use real case studies related to "hot" issues for today's electricity regulators,

stakeholders, and market participants; and explore substantive policy and skills-based knowledge, demonstrating how practitioners in the field are advancing clean energy policies at the national, regional, state and local levels.

The course will include four three-hour sessions, Monday, June 12 – Thursday, June 15, from 9am-12pm ET.

There will be a take-home final due by Sunday, June 18 at 5:00 pm ET (to be submitted by uploading your completed exam on TWEN).

Course Objectives:

To have students understand:

- At a basic level, bedrock laws that shape the U.S. electricity grid and the key decisionmakers influencing policy at the federal, state and city levels;
- Key legal and policy challenges facing regulators and stakeholders in today's electricity markets, particularly given the transition to a pollution-free power sector;
- The varying perspectives and concerns of electricity sector stakeholders and market participants; and
- The advocacy skills necessary for these stakeholders to navigate and influence electricity regulation and markets.

Requirements and Grading:

A textbook and other readings will be supplemented by real world practical applications. Class sessions will be organized around lectures, discussion, and exercises. Student presentations during Class 4 will represent 25% of the grade. A take-home final exam will account for 50% and class participation will count for the final 25%. Preparation for, attendance at, and active, collegial participation in every class session is expected. *Please read the assigned materials in advance of that class – bonus materials are provided for your interest but are not required reading.*

General Texts and Readings:

1. Lazar, J. (2016) Electricity Regulation in the US: A Guide, Second Edition, The Regulatory Assistance Project, available on the class Teams channel here

- under "Files") or online at http://www.raponline.org/knowledge-center/electricity-regulation-in-the-us-a-guide-2
- 2. Tomain and Cudahy (2022), Energy Law in a Nutshell, 4th Edition (available at Barristers)
- 3. Various short readings and podcasts are available online (and some posted on Teams), listed below.

Reference Material:

1. Bloomberg New Energy Finance, 2023 Sustainable Energy in America Factbook, available on the class Teams channel here under "Files") or online at https://bcse.org/factbook/

Class 1: Monday, June 12

The Basics of Electricity Policy and Electric Utility Regulation: This class will introduce the basics of electricity law and the traditional framework for electric utility regulation in the U.S., and how it has evolved in the last century. We'll discuss the role of the federal government, states and cities in shaping climate and clean energy policy, the basics of utility regulatory legal practice, and challenges with the traditional utility cost-recovery model. Class will wrap with a small group exercise that illustrates stakeholder perspectives and common issues that arise in state utility regulatory cases.

Assigned Materials:

- Electricity Regulation in the US Intro, and Chapters 1-3 (pp. 1-24) (Purpose of Utility Regulation; A Brief History of Regulation; Industry Structure)
- Energy Law in a Nutshell Chapter 3, excerpts of Sections F and G (Federal Energy Regulation; Energy Regulation by States): pp. 137-153
- RMI, Navigating Utility Business Model Reform Chapter 1 only (pp. 10-16), <u>https://rmi.org/insight/navigating-utility-business-model-reform/</u> (also posted to Teams)

Class 2: Tuesday, June 13

The Road to a Clean Power Grid: This class will examine U.S. clean power trends, including renewables, energy efficiency, carbon, and energy storage policies. We will discuss the wave of 100% renewable and net-zero power commitments, and

the opportunities and barriers to achieving that vision—the central debate in the electric utility industry today. We will use the New York Climate Leadership and Community Protection Act and the Illinois Climate and Equitable Jobs Act as case studies on how stakeholders are influencing the debate over renewables from multiple perspectives, and the tradeoffs of an ambitious energy policy.

Assigned Materials:

- Energy Law in a Nutshell, Chapter 11 (Clean and Net Zero Energy)
 - o Energy Efficiency (Sec. A.5), pp. 529-538
 - o Renewable Resources (Sec. A.1-2) pp. 510-519
 - o Non-Federal Approaches to Clean Energy (Sec. C), pp. 550-555
 - o Bonus (not required): Future Clean Resources (Sec. B), pp. 538-550
- Podcast: A 90% Clean Grid Can Be Achieved Quickly. What's Holding It Back? (The Energy Gang, June 19, 2020, Katherine Hamilton, Jigar Shah and Stephen Lacey), https://www.greentechmedia.com/articles/read/a-90-clean-grid-is-possible-fast-whats-holding-it-back]
 - First 28 minutes is assigned listening, but feel free to listen to the 2nd half for a discussion of public perception on the intersections between climate and social justice policies).
- 2023 Outlook: US power sector trends to watch (Utility Dive, Jan. 13, 2023), <u>https://www.utilitydive.com/news/2023-us-power-sector-trends-renewables-reliability-FERC-cybersecurity-hydrogen-nuclear-storage-EVs/640307/</u>

Reference/Bonus Content: (not required reading)

- Story Map: Race to 100% Clean (Natural Resources Defense Council, updated April 14, 2022), https://www.nrdc.org/resources/race-100-clean
- Podcast: Stunning new data on the economics of US coal vs. renewables
 (The Carbon Copy, Feb. 22, 2023),
 https://www.canarymedia.com/podcasts/the-carbon-copy/stunning-new-us-data-on-coal-vs-renewables

Class 3: Wednesday, June 14

Natural Gas and Nuclear Power: What is Their Role in a Carbon-Free Future? We will build upon the active debate of the opportunities and challenges with

achieving a carbon-free electric grid, examining another perspective: the role of traditional resources like gas and nuclear power. We will cover the waning era of the (traditional) US nuclear fleet and discuss the legal and policy debates in states that are seeking to keep nuclear power plants operating despite strong market pressures. Following the morning's lecture will be a *pre-recorded* conversation with Federal Energy Regulatory Commission (FERC) Commissioner Allison Clements. Class will wrap with a small group exercise, applying some of the energy policies discussed in Classes 1-3.

Assigned Materials:

- Energy Law in a Nutshell
 - o Chapter 6, Natural Gas Read only: Section D, pp. 306-314
 - Chapter 9, Nuclear Power Read only: Introduction and Section A (Industry Overview), Section B (Regulatory Overview), pp. 421-439
 - Bonus (not required): Chapter 9, The Future of Nuclear Power (Sec. B), pp. 468-472
- The Controversial Future of Nuclear Power in the U.S. (National Geographic, May 4, 2021, Lois Parshley),
 <u>https://www.nationalgeographic.com/environment/article/nuclear-plants-are-closing-in-the-us-should-we-build-more</u> (also posted to Teams)
- 2023 Outlook: FERC enters 2023 with a new leader, a vacant seat and an agenda topped by transmission and grid reliability (Utility Dive, Jan 24, 2023, Ethan Howland), https://www.utilitydive.com/news/ferc-agenda-outlook-gas-reliability-transmission-extreme-weather-phillips/641017/

Reference/Bonus Content: (not required reading)

- Taking Charge: Commissioner Clements on FERC's 'make or break' role amid the energy transition (Utility Dive, March 16, 2021, Catherine Morehouse), https://www.utilitydive.com/news/taking-charge-commissioner-clements-on-fercs-make-or-break-role-amid-th/596736/
- Nuclear power gets another look in 'all-of-the-above' energy approach as climate worries mount (Utility Dive, Jan. 20, 2023, Stephen Singer), https://www.utilitydive.com/news/nuclear-power-smr-climate-ira-omnibus-spending/639484/

Class 4: Thursday, June 15

Federal Energy Policy: What is the Path Forward? – plus Class Exercise

We will start class with a discussion of efforts underway with the Biden Administration and Congress to advance infrastructure, climate, and energy policy. We will touch on new climate and clean energy funding in the form of the Infrastructure Investment and Jobs Act and the Inflation Reduction Act, and the new era of regulating CO2 from electric power plants in the wake of the Supreme Court's decision in *West Virginia v. US EPA*. The remainder of class will be devoted to mock legislative sessions with student presentations that build on the hot topics discussed throughout this module.

Assigned Materials:

- Energy Law in a Nutshell
 - Chapter 2 Read only: Section G, Energy Policy Since the End of the 20th Century, pp. 94-101
 - o Bonus (not required): Chapter 12, A Just Transition, pp. 557-579
- Podcast: America is Finally Doing Something Big on Climate (The Carbon Copy, Aug. 10, 2022), https://www.canarymedia.com/podcasts/the-carbon-copy/america-is-finally-doing-something-big-on-climate
- Supreme Court Limits E.P.A.'s Ability to Restrict Power Plant Emissions (New York Times, June 30, 2022, Adam Liptak), https://www.nytimes.com/2022/06/30/us/epa-carbon-emissions-scotus.html?smid=url-share (also posted to Teams for those without a NYT digital subscription)

Reference/Bonus Content: (not required reading)

- The Bipartisan Infrastructure Package: What it Means for Energy and Climate (Beveridge & Diamond, Nov 15, 2021), https://www.bdlaw.com/publications/the-bipartisan-infrastructure-package-what-it-means-for-energy-and-climate/
- Politico Energy quick-take podcasts:
 - 8 min: Supreme Court could put Biden's climate regulations at risk
 (May 3, 2023), https://politico-energy.simplecast.com/episodes/supreme-courts-move-puts-biden-climate-regulations-at-risk

- 9 min: Inside Biden's crackdown on power plant emissions (May 12, 2023), https://politico-energy.simplecast.com/episodes/a-guide-to-bidens-new-power-plant-rule
- 8 min: How Biden's latest climate rule could impact the power grid (May 15, 2023), https://politico-energy.simplecast.com/episodes/biden-went-big-on-power-plants-is-the-us-power-grid-ready