SPEA V-450 (Fall, 2010) CONTEMPORARY ISSUES IN PUBLIC AFFAIRS:

"Climate Change and Electricity"

Tu/Th 9:30-10:45 a.m. in Sycamore Hall 006

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COURSE DESCRIPTION:

The course "Climate Change and Electricity" will examine how global warming concerns will affect policy makers and power producers in deciding how electricity will be made and used in our increasingly electrified national economy. The interaction of various government agencies, industry and interest groups with legislators and regulators to determine where power will be produced, how and at what cost will be described. Why and how the U.S. reliance upon investor-owned 'for profit' companies to supply 75% of our electricity will be compared to the rest of the world's public power commitment. The political challenge presented by our current use of coal for 50% of U.S electricity—over 90% in Indiana—in an era of global climate change concerns will be addressed and various policy options considered. Is 'clean coal' an oxymoron or potential panacea? Can the 30-year moratorium on building new U.S. nuclear plants end without resolving radioactive waste disposal issues? How much new power will be required for electricity to replace gasoline in U.S. vehicles? What obstacles block the dramatic growth needed in wind, solar, biomass and other renewable energy sources to replace current fossil fuel generators? How can the difficulty of siting new power plants and additional transmission lines connecting them to the national power grid be overcome? How much could more efficient power use reduce the need for new power generation? The advocacy techniques used by the

various players in environmental/energy policy disputes (e.g. coalition-building, grassroots fundraising and mobilization, earned vs. paid media) will be analyzed with special attention to topical media discussions of climate change legislation and related issues.

The instructor is a former senior executive and policy advocate for the USEPA, USDOE, natural gas industry, several Fortune 500 energy companies, a Member of Congress and the State of Indiana. He has professional experience in over twenty U.S. states and foreign countries and is a past Chair of SPEA's Board of Visitors. Students will be expected to prepare and present papers on energy topics of their choice. Topics will be covered in class that are not part of the readings; regular attendance and active participation in classroom discussion will be important to success in this course.

REQUIRED TEXTBOOKS: From Edison to ENRON by Richard Munson; COAL: A Human History by Barbara Freese; and Hot, Flat and Crowded by Thomas L. Friedman.

GRADING:

There will be a mid-term examination worth 30% and a final examination worth 45% of the course grade. A research paper and its defense in an advocacy exercise will constitute the remaining 25% of the final grade. Anyone caught cheating on an examination automatically fails the course and will be handled according to University policy. Missing either the mid-term or final exam will require a compelling excuse to justify a make-up opportunity. All students are expected to adhere to the Code of Student Rights, Responsibilities and Conduct published by Indiana University.

CALENDAR (subject to change as course develops):

8/31-9/2 Course Introduction—overview, policies, procedures and grading. Current role of electricity in U.S. economy and future projections

9/7-9/9 History of U.S. electricity growth and early industry leaders (eg Edison, Insull and Willkie) READING: Munson, pp 1-75; Friedman, pp 26-76

9/14-16 U.S. industry structure—public vs private ownership of utilities and contrast with prevailing global model. De-regulation of telecommunications vs electricity providers READING: Munson, pp 76-132; Friedman pp 203-240 and pp 407-8

9/21-23 Key players—regulators, legislators, agencies and interest groups—and how they interact with power industry. READING: Munson, pp 133-187; Friedman, pp 241-296

9/28-9/30 History of coal usage and how it came to dominate U.S. and global power production. READING: Freese. pp 1-163; Friedman pp 152-199

10/5-10/7 Coal's future in climate change era READING: Freese, pp 163-248

10/1-10/14 Natural Gas: second only to coal as power generator and main competitor with electricity in residential, commercial, industrial and transportation markets. READING: tbd

10/19-10/21 Nuclear energy: can carbon overcome radioactive waste concerns? Why does France rely upon nuclear for 77% of its electricity vs U.S. not building a 'new nuke' for 30 years? READING: Friedman, p 163, pp189-90 and pp 214-240; Munson, pp 78-82, 96-99, 145-146

10/26 Mid-Term examination

11/27-29 Obstacles now blocking hydro, wind, solar, biomass and other renewables from replacing fossil fuels as power generation sources. READING: Friedman (throughout)

11/2-11/4 NEGAWATTS vs. MEGAWATTS: how efficiency gains can obviate need for new power plants. READING: Friedman, pp 269-296, 286-7, 285-90, 397

11/9-11/11 Electricity Transmission and Transportation challenges READING: Friedman pp 219-221, 290-293, 364, 392, 397 and 408

11/16-11/18 Climate Change as future driver of electricity policy READING: Friedman, pp317-412; Freese, 246-248

11/23 Advocacy exercises

11/30-12/2 Advocacy exercises continue

12/6 Free week

12/16 Final Examination (10:15-12:15)