Course Description and Syllabus

Format: Seminar, 3 hours.
Time: Mondays and Wednesdays, 3:30 p.m. to 5 p.m.
Credits: 3
Grading tools: Paper and class participation. Ratio: 30 percent participation, 70 percent paper.
Office hours: By appointment.
Class protocol: No use of cell phones, emailing or texting will be allowed during class.
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Description: Students will examine utility law in Arizona and the United States, with a particular focus on how traditional ratemaking is accomplished in an era of renewable energy portfolio standards, energy efficiency mandates and greenhouse gas emissions reductions regimes for electric and natural gas utilities. Since energy sustainability laws and regulatory policies are largely imposed on and carried out by utilities, the course will begin with an examination of the fundamentals of utility regulation. Additionally, the course will follow current trends in utility regulation such as adjustor mechanisms designed to pass through natural gas and other commodity costs, renewable energy and energy efficiency surcharge mechanisms and the rate-basing of renewable energy projects, construction work in progress allowances in rate base, and attrition adjustments. Finally, the course will address new and emerging trends in utility law, including a discussion of transmission policies promoting renewable energy development, federal and state efforts on Demand Response and the Smart Grid, and the regulation of greenhouse gasses, including proposed federal climate change legislation.

Syllabus:

I. Introduction to utility ratemaking principles.
   a. Public Utility Commission Composition and Jurisdiction
   b. Legal concepts of state and federal regulation
   c. The objectives of utility regulation
      i. Forms and functions.
ii. The qualities of a good regulator.

d. Finding of Fair Value rate base; rate of return regulation. (Tomain 101-138).
   i. Determining operating expense, depreciation, taxes.
   ii. Finding the Rate Base.
   iii. Finding the Rate of Return
      1. Determining Return on Equity (ROE)
   iv. Finding Fair Value Rate Base.
   v. Determining the rate structure.

e. Federal development of utility regulation. (Tomain 120-138)
   ii. Bluefield Waterworks & Improvement Co. v. Public Service Comm’n of West Virginia.
   iii. New Jersey Central Power and Light v. FERC and Duquesne Light Co. v. Barasch
   vi. Public Utility Holding Company Act (PUHCA).
   vii. Rate Reform (Tomain 139-170)
      1. Structured and Restructured Energy Markets in the United States
         a. The development of Regional Transmission Organizations in the East.
            i. FERC Orders 888, 889, 2000.
            b. Attempts at restructuring in the West and the return to vertically integrated monopolies.
            c. Enron and the California debacle
      2. Price level regulation
      3. Market based rates
      4. Recent trends in cost-based rate making: Construction Work in Progress (CWIP), attrition adjustments, fuel adjustor mechanisms and surcharges to pass through volatile commodity costs directly to consumers and
increased use of hypothetical capital structures: risk shifts or policy mechanisms necessary to modern energy provision?


f. The development of state authority over utility regulation and ratemaking

i. Constitutional underpinnings of the Arizona Corporation Commission’s wide authority, as well as statutes and rules guiding Commission authority over establishing rates, charges and utility standards: Article 15, Arizona Constitution.

ii. ARS § 40-321 to 360.

iii. Attorney General’s Opinion 71-17.


v. Cases interpreting the scope of the Commission’s authority.
   4. Arizona Community Action Association v. ACC.
   5. Scates v. ACC.
   6. Phelps Dodge v. AEPCO.
   7. Goldwater Institute (Miller) v. ACC: The struggle over who should regulate renewable energy in Arizona.

II. Federal and state renewable energy policy.


b. Distributed generation versus utility scale renewable energy projects.

c. Comparative analysis of Arizona’s REST and the 29 other state Renewable Energy Portfolio Standards.

d. A national renewable portfolio standard: pros and cons.

e. Feed-in tariffs (FiTs): The panacea to widespread adoption of solar, or a bad fit for the U.S.?
   i. State efforts at adopting a feed-in tariff: CA, AZ, Gainesville, Florida, Vermont.
   ii. FERC Decisions guiding state vs. federal jurisdiction.
   v. APS Response to Notice of Inquiry Concerning the Establishment of a Statewide Feed-in Tariff for Arizona’s Public Service Corporations.

f. Federal tax incentives for renewable energy.
   i. Investment tax credit (ITC).
   ii. Production tax credit (PTC).
   iii. The federal Treasury grant for renewable energy generation.

g. Net metering policy in Arizona and other states.
   i. Arizona’s net metering rules, R-14-2-2301 to 2308.
   ii. Aggregated net metering efforts in CA, AZ and elsewhere.

III. Other issues in renewable energy regulation.
   a. Siting of transmission and energy generation projects in an era of renewable energy: Should it be a federal or state responsibility?


IV. The role of the Federal Energy Regulatory Commission (FERC) in adopting policies promoting renewable energy, renewable energy transmission and energy efficiency.

a. Federal efforts to preempt state line siting authority through backstop authority at the Federal Energy Regulatory Commission (FERC) and the Department of Energy's establishment of National Interest Electric Corridors (NIETC's) pursuant to EPAct 2005.
   i. FERC’s Notice of Proposed Rulemaking on Cost Allocation: Who should pay for and plan the new renewable energy transmission system?

b. Arizona’s Power Plant and Line Siting Committee
   i. Must large-scale renewable energy projects go before the Arizona Power Plant and Line Siting Authority?
   ii. How broad should the definition of “need” be in order to approve power lines and power plants?
   iii. ARS § 40-360.
   iv. The water-energy nexus: Should states mandate that Concentrating Solar Power Plants (CSP) be dry cooled in the arid Southwest?
   v. Case Study: The Proposed Devers/Palo Verde II Powerline. Decision No. 69638

c. Land-use decisions: should federal lands be made available for expedited use by renewable energy developers or should normative permitting processes be used?

d. When environmental policies have environmental impacts. The impact of renewable energy projects on the environment.

e. Do third party purchase power agreements for renewable energy qualify as public service corporations, requiring the issuance of a Certificate of Need and Necessity (CC&N)?
   i. Solar City Corporation Adjudication, Decision No. 71795.

V. Demand Side Management, Demand Response and Energy Efficiency Resource Standards.

a. The increasing use of the “Negawatt” to serve growth: An analysis of state policies.

b. Decoupling: is it necessary to spur on energy efficiency?

c. Demand Response: Controlling the cost of producing electricity at peak times by paying homeowners and businesses to turn down their electricity usage.

VI. Toward a smarter electric power grid.
   a. What is the Smart Grid?
   b. State and federal efforts to encourage the development of a smart grid, in order to facilitate the integration of renewable energy, energy efficiency and demand response.

VII. The Law of Climate Change: Regulatory Approaches to Collaring Greenhouse Gasses.
   a. Western Climate initiative, California’s AB 32, Warner-Lieberman and other proposed federal legislation on greenhouse gas reduction.
   b. The role of state renewable portfolio standards and energy efficiency mandates.
   c. The impact of the 10th amendment on a federal approach to carbon regimes.