Professor(s): Brant Johnson; <u>Brant johnson@transcanada.com</u> 713-485-9269 (cell) Diane Neal; <u>sdianeneal@icloud.com</u>; <u>sdneal@paalp.com</u> 202-288-5567 (cell, texting is great) When contacting the professors please include both on your email to ensure a reply.

Course materials will be a selection of statutes, regulations and cases provided by the professors via email or in hard copy.

Week 2 Professor Neal will be presenting an "Oil 101" seminar in The Woodlands Jan. 25, 2018. Reading will be provided to students ahead of time in lieu of class. Any students interested in attending the seminar (NOT REQUIRED) please contact Prof. Neal for more information.

Week 1 <u>Introduction to Pipelines</u>

Week 4

Course Introduction and overview of the gas and oil pipeline industry, pipeline construction and operations, and natural gas storage.

Reading: Pages 1-18 of INGAA Deskbook.

(http://www.ingaa.org/File.aspx?id=6070&v=93da0a9f) Visit ferc.gov and become familiar with the website. Review "industry" and "Major Orders" sections

Week 2 <u>History of Natural Gas and Oil Pipeline Regulation</u>

Overview of Federal Energy Regulatory Commission (FERC) jurisdiction; the Natural Gas Act and Natural Gas Policy Act; Interstate Commerce Act, FERC Order 636; FERC 1999 Policy Statement. Reading: FERC Order 636 (https://www.ferc.gov/legal/maj-ord-reg/land-docs/restruct.asp)

Week 3 <u>FERC Jurisdiction and Authority to Transport</u>

Determining state vs. federal jurisdiction in gas and crude transportation. Reading: NGA Section 7 (15 USC 717f: Construction, extension, or abandonment of facilities); cases to be provided.

Construction of Facilities and FERC Certificates

Certificate application process and FERC authority under NGA. Requirements of certificate application and interagency cooperation and inclusion of LNG facilities under FERC jurisdiction. Read Sec. 3 of the NGA, to be provided. Contrast with oil pipeline construction.

FERC Natural Gas and Oil Pipeline Tariffs and Filings

Week 5 Discussion of the general terms and conditions contained in interstate pipeline tariffs and pro forma service agreements. Contrast with "material deviations". Reading: sample tariff and service agreement (to be provided); read Southern Star order on material deviation policy (to be provided).

FERC Rate Design and Rate Cases and Investigation Authority

Week 6

Review sections 4 and 5 of NGA, rate design policy; contrast oil and natural gas rate differences. FERC's ability to initiate a rate investigation to determine "just and reasonable" rates. Read Hope v. Bluefield (provided) and Viking Pipeline Order Initiating Investigation; Order on Rehearing (provided).

Continuation of Rate Policy discussion from Week 6.

Week 7

Read: Tuscarora Pipeline Order Initiating Investigation and Orders on rehearing from 2011 and 2016. Compare development of FERC policy between the two series of Orders. Introduce FERC Audit authority. Reading: FERC 2016 Audit Report (provided).

Oil and Gas Environmental Challenges:

Week 8

Delaware Riverkeeper v. FERC Case Study

Basics of administrative law and FERC appeal process; Overview of Tennessee Gas Pipeline orders and "cumulative impacts" and "connected actions" Compare to differences in challenges to oil pipeline projects. Cases provided.

National Environmental Policy Act (NEPA)

Week 9

Cooperating agencies; Who is involved? FERC as lead agency and EPAct 2005 authority to issue deadlines to cooperating agencies. Army Corp of Engineers, "SHiPO", Clean Water Act permitting, recent legislation. Read: Review selections from Energy Policy Act of 2005.

Land Rights and Eminent Domain

Week 10

Eminent domain authority under NGA, process of condemnation in construction of infrastructure interstate vs state. Recent developments in land owner rights-court cases to be provided (TX and WV)

Restoration, Maintenance, and Operations

Week 11

What happens once the pipeline is completed? Requirements to "put back the way you found it". Review weekly status reports to FERC (to be provided) and Sample Environmental Impact Statement. Discuss right of way easement and maintenance, land owner encroachment.

Pipeline Safety

Week 12

Guest lecturer, intro to PHMSA and jurisdiction. Pipeline Safety Act and related legislation.

Pipeline Opposition

Week 13

Dakota Access Case Study (oil pipeline), Minisink compressor station case study (Millennium Pipeline) and Williams rejection by NY state of required permit (Constitution Pipeline)

Week 14 <u>Course Wrap Up/Open Discussion/Review</u> Will also discuss exam

Policies

Each week 2 students will be the subject "expert" for the session and will be expected to have read the materials and lead class discussion. Maximum of 10 points given for participation and leading class discussions.

Final Exam **in class**: TBD = 6 - 8 pm; multiple choice and short essay

Attendance policy: A maximum of 3 absences is permitted. Additional absences will result in 2 points per absence off final grade.

Final grade based on final exam and participation with adjustments for attendance as outlined above if applicable.

Office hours for both Professor Johnson and Professor Neal will be by appointment and may be arranged via email.

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to the demands of a professional program, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets-talk.html