#### Mission Statement:

The UTC protects consumers by ensuring that utility and transportation services are fairly priced, available, reliable, and safe.



## Washington Utilities and Transportation Commission

Franchises, certificates, and service area agreements:
Entry to energy industries in Washington and US

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### Outline



#### Part 1 – Entry: Theory and Background

What is "entry"?

Why does it matter?

Types of entry regulation

#### Part 2 – Entry to energy industries

Overview

#### **Electricity:**

Generation, power marketing, transmission, retail distribution

#### **Natural Gas:**

Gas supply, pipeline transmission, retail distribution

### I. Entry – theory and background

#### A. What is "entry"?



Regulation deals with many aspects of doing business, including the ability of a firm to enter an industry.

- A firm must secure the right to engage in a particular business.
   "Entry" is a generic term for this process.
- Entry can be very easy or very difficult, depending on the standards and procedures established by lawmakers (Congress, legislatures) for that industry.
- Ideally, entry requirements are shaped by the type business and industry. Competitive industries should theoretically have easy entry.
- Because entry standards are a political decision, the legislative process may create standards that don't match industry characteristics, or that respond to private rather than public objectives (e.g. preventing competitors).

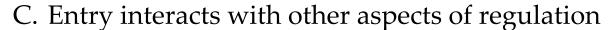
- I. Entry theory and background
- B. Entry should match industry



Entry may be shaped by the nature of the industry or market.

- Is an industry capital intensive, requiring massive investment before it can start serving customers, or is the investment relatively small or discrete?
- Is the industry a network that derives benefits from having many people connected to and using it?
- Is the industry relatively vital, necessary to life and society, or is it relatively discretionary?
- What's the length of time necessary to recover investment used in providing services?

### I. Entry – theory and background





- Environmental regulation or land use permitting. Environmental review and permitting, and securing local land use permits, may be separate from entry permitting. In some cases, though, the process for granting certificates to generation facilities or pipelines may include reviewing environmental impacts or issuing air and water permits.
- Setting and approving rates. A utility that has an exclusive right to serve an area may need greater regulatory attention to prices and customer service than a company facing competitive pressure.
- Accounting standards Recent study of entry regulations in west, east Europe found that accounting standards improve access to credit and so enhance entry.
- Affiliated interests If a firm has a monopoly in one part of a utility system (e.g. transmission), it may favor sister companies in a competitive part of the system (e.g. energy marketing). The Federal Energy Regulatory Commission (FERC) treats entry by energy marketers differently if they have a generating affiliate. When FERC restructured the gas pipeline industry, it required pipelines to stop marketing natural gas.
- Interconnection A firm with a monopoly in one element of the network still needs to interconnect with other geographic areas and/or elements of the system.

### I. Entry – theory and background

#### D. Why does entry matter?



- A basic assumption in economics is that there are no barriers to entering or exiting a competitive market. "Contestable markets" theory suggests that the threat of entry by a new competitor will make a monopoly firm keep prices low.
- Some industries have economies-of-scale where it is cheaper for a single firm to provide service than many small firms. Such "natural monopolies" may be best provided by limiting entry.
- In the 19<sup>th</sup> century, firms in certain easy-entry industries (ferries) engaged in "cut-throat" competition, reducing prices below cost, then skimping on safety and investments, leading to public health dangers and low-quality service.
- Even if there are few barriers to entry, there may be insufficient customers in a region to support more than one firm. Rural bus transportation, for instance, may have low entry investment, but if there are a few riders, only one company could be profitable.

# I. Entry – theory and backgroundE1. Types of entry



- Permit: a written warrant or license granted by one having authority.
- License a right or permission granted by a competent authority (such as a government agency) to engage in some business or occupation . . . which would be unlawful without such right or permission
- **Certificate**: A document certifying that a person has fulfilled the requirements of and may practice in a specified field. Example: a teaching certificate.

# I. Entry – theory and backgroundE2. Types of entry: Franchise



- **Franchise** is a right granted to a public utility to provide services and use public land for that purpose.
- More specifically, a franchise is legal document authorizing a utility to use a public right-of-way, such as a road, for utility purposes and spelling out terms and conditions for such use (e.g. when and how the utility can work on its facilities).
- In Washington, franchises are granted to utilities by local (city or county) governments.
- For examples, see Municipal Research and Services Center (MRSC) web site:

Franchise ordinances: http://www.mrsc.org/Subjects/Telecomm/franchisepg.aspx Right-of-way use ordinances: http://www.mrsc.org/Subjects/Telecomm/rightpg.aspx

# I. Entry – theory and backgroundE3. Types of entry - Transportation



- **Fit, willing and able:** An entry standard for transportation industries that means, in effect, law-abiding, with sufficient resources and experience to carry out the business.
- Certificate of public convenience and necessity (PCN): A certificate granting a company the authority to operate a public service company. Entry usually requires a new firm to show that existing service providers are not meeting the needs of customers.
- Common carrier: A common carrier must serve all customers (related to "obligation to serve") and cannot discriminate against any customers that wish to use its facilities (e.g. by favoring an affiliate)

### I. Entry – theory and background





Entry ranges from easy to difficult, markets to monopoly.

- Very easy entry No permit required, no barriers to entry or exit.
   Example: starting a farm.
- Easy entry Registration: provide minimal information, little or no fee. Example: competitive telecommunications at UTC.
- Somewhat easy entry Permits and licenses; "fit, willing and able" standard for competitive trucking.
- Somewhat difficult entry Franchises, long-term contracts, auctions, some certificates.
- Difficult entry Certificate of public convenience and necessity (PCN); site certificate for energy facilities. Require detailed information, large fees, may require formal hearings.
- Monopoly Legislative or royal charters.

# Part II – Entry in Washington and USA



# Part II Entry to energy industries - Washington and USA

- Electricity: Generation, Transmission, Distribution, Power Marketing
- Natural gas: Supply, Pipeline transmission, Retail distribution

# Part 2 – Entry to Energy Industry A. Overview



#### General division of entry and pricing authority:

- State government regulates entry and prices for retail distribution service (gas and electric), and siting of electricity generation.
- <u>Federal government</u> regulates entry and prices for wholesale services and interstate commerce, e.g. interstate natural gas pipelines, energy marketing.
- Washington state is unique:
  - No state laws requiring franchise, license or certificate for electric distribution companies.
  - Federal government owns 80% of transmission, so little need for state transmission siting laws.

# Part 2 – Entry to Energy Industry B. Electricity generation - Hydro



- Hydroelectric dams must obtain licenses from the Federal Energy Regulatory Commission (FERC).
- Licenses have a term of 30 to 50 years.
- FERC authority includes
  - o Issuing licenses for construction of a new project;
  - o Relicensing existing projects that continue operations;
  - o Oversight of all ongoing project operations, including dam safety inspections and environmental monitoring.
- Relicensing is a complex process that can take years, involving negotiations among environmental interests, Native American tribes, and other stakeholders. The flow chart of FERC's review process takes 28 pages.

See: http://www.ferc.gov/industries/hydropower/gen-info/workflow.pdf

### Part 2 – Entry to Energy Industry

#### C. Electricity generation – large thermal



- Electric generation facilities in Washington over 350 mW must obtain a site certificate signed by Governor after recommendation from Energy Facility Site Evaluation Council (EFSEC)
- Applicants gain some benefits in efficiency, as EFSEC becomes the sole permitting authority, including local land use permits and state air and water quality permits. Thus, a facility doesn't have to obtain multiple permits from a variety of governments. Permits become part of the site certificate agreement (SCA).
- Usual term for SCA is 10 years, but this isn't set in law or rule.
- Application process includes environmental review, legislativestyle public hearings, and judicial-style hearings.
- EFSEC also handles oil pipelines, oil refineries, and gas storage, but not electricity transmission facilities.
- Reference: chapter 80.50 RCW.

#### Part 2 – Entry to Energy Industry D. Electricity generation – small thermal



- Electric generation facilities smaller than 350 mW obtain permits from local, state government.
- Local government permitting requirements include:
  - Completing an environmental checklist and possibly preparing an environmental impact statement (EIS).
  - Obtaining "conditional use" permits and building permits required by city or county land use and zoning laws.
- State permits include water quality permits and air quality permits from Dept. of Ecology.

### Part 2 – Entry to Energy Industry E1. Electric and Natural Gas Marketing



- Power marketers that buy and sell electricity in wholesale markets are regulated by FERC.
- Power marketers that sell electricity for resale at wholesale prices are required to have a rate schedule on file with the Commission, and are considered to be public utilities under the Federal Power Act, so must comply with a number of regulations that apply to all public utilities.
- However, many of the regulations that customarily apply to traditional public utilities are relaxed or waived. Example: Power marketers need not file accounting records, which are generally used only for traditional cost-based ratemaking.

# Part 2 – Entry to Energy Industry E2. Power marketing



- Power marketers that do not own or control transmission or generation facilities that could give them market power may charge market-based rates. Affiliated power marketers are subject to other requirements, including a code of conduct.
- There is no charge for a power marketer's initial application for approval of its market-based rates. FERC fees are assessed only when and if electricity sales occur.
- There is no standard form to apply for approval of market-based rates. The applicant must request market-based rate authority by filing a pleading with the Commission.
- Power marketers get market-based rate approval through an order issued by the FERC accepting the power marketer's rates.
- Rates go into effect after 60 days notice to public and FERC.
- See: http://www.ferc.gov/industries/electric/gen-info/pm-over.asp

# Part 2 – Entry to Energy Industry F. Electricity Transmission



- FERC has jurisdiction over transmission lines that run between states.
- Most transmission in Washington is owned by federal power marketer Bonneville Power Administration (BPA), so is not under state jurisdiction.
- BPA has right of eminent domain so can take land for transmission lines, but must review environmental impacts of projects under National Environmental Policy Act (NEPA).
- Transmission lines by investor-owned utilities follow local government permit requirements: environmental review, conditional use permits, and building permits.

# Part 2 – Entry to Energy Industry G1. Electricity distribution in WA



Washington State may be unique in that it does not have exclusive distribution service territories or entry requirements for electric utilities under WUTC jurisdiction.

Electric service areas are product of historic development, practice, and economics, rather than any legally binding territory definition.

# Part 2 – Entry to Energy Industry G2. Electricity distribution in WA



Study for legislature during WA restructuring debate (1998) found arguments in favor of exclusive distribution service territories:

- Clarify geographic boundaries within which a utility may serve.
- Identify the utility having the obligation to serve customers within those boundaries.
- Reduce uncertainty and risk associated with customers "bypassing" the utility (i.e. being served by another firm).
- Eliminate duplicate lines and facilities.

Also heard arguments against exclusive distribution areas:

- Threat of bypass exerts competitive pressure on utilities to keep rates low (economic theory of "contestable markets".)
- WA utilities use service territory agreements to set boundaries.
- Public-owned electric utilities (PUDs, municipal utilities, etc.) have existing political boundaries, do not want UTC to regulate them.

# Part 2 – Entry to Energy Industry G3. Distribution utilities - PUDs



- **Public Utility Districts (PUDs)** are formed by election. The ballot measure describes the area to be served. Majority approval of the measure sets the service area.
- The service area is generally identical to the county boundary, but some PUDs serve areas smaller than the entire county (for instance, voting district lines).
- A PUD may build and operate generation, distribution and transmission facilities both within and outside its boundaries to furnish electricity to its inhabitants or other persons. However, the WA Supreme Court has ruled that such activity must be reasonably related to the PUD's core purpose of serving its own customers.
- If a PUD wants to build utility plant inside a city or town, the city's governing body (e.g. city council) must consent to the service and approve a plan for construction.
- Reference: chapter 54.08 RCW

# Part 2 – Entry to Energy Industry G4. Distribution – Municipal utilities



- Cities are authorized to provide electric service both within and outside of their political boundaries.
- Some cities, such as Seattle City Light, provide electricity to adjoining areas, both to other incorporated cities (such as Shoreline) and to unincorporated areas under county authority.
- Cities own generation facilities outside their service area (e.g. Seattle City Light owns dams in North Cascade mountains) and transmission facilities that move power to their customers.

## Part 2 – Entry to Energy Industry G5. Distribution utilities – Other utilities



- **Electric cooperatives** non-profit corporations have no set boundaries. Service territories are presumably a function of the geographic distribution of the cooperative's members and the historic placement of distribution facilities which the cooperative has built or acquired. 14 co-ops serve 140,000 customers.
- Irrigation districts, special purpose municipal government created to distribute water for agricultural uses, are authorized to provide electricity to the district's inhabitants. Thus, the district boundaries define the limits of the electric service territory. One irrigation district provides electric utility service.
- **Port districts** are authorized to operate water, light, power, and fire protection facilities within areas established as industrial development districts, so cannot provide service beyond the boundaries of the industrial development district. One port district acts as an electric utility.

### Part 2 – Entry to Energy Industry H1. Service area agreements



- The Legislature allows investor owned utilities (IOUs), PUDs, co-ops and municipal utilities to agree on how to serve adjoining territory through service area agreements (chapter 54.48 RCW).
- These are voluntary contractual arrangements of up to 25 years duration.
- If they involve an IOU, they must be reviewed and approved by the UTC.
- By authorizing service territory agreements, state law establishes a basis for defining distribution system boundaries, but only if the affected utilities can come to a voluntary agreement.

#### Part 2 – Entry to Energy Industry H2. Service area agreements - Purpose



 "The legislature hereby declares that the duplication of the electric lines and service of public utilities and cooperatives is uneconomical, may create unnecessary hazards to the public safety, discourages investment in permanent underground facilities, and is unattractive, and thus is contrary to the public interest and further declares that it is in the public interest for public utilities and cooperatives to enter into agreements for the purpose of avoiding or eliminating such duplication." RCW 54.48.020.

### Part 2 – Entry to Energy Industry H3. Service area agreements - Details



- In 1998, there were 17 service area agreements in effect, plus 11 agreements that had expired but were still being observed. All but four have specific geographic boundaries.
- The largest geographic area covered by a service area agreement is 4,296 square miles; the smallest is one square mile..
- The overwhelming majority have 20 to 25 year terms. Three agreements contain provisions for automatic renewal as they expire. All agreements may be renewed by mutual consent of the parties.
- Most service area agreements have operated successfully without disputes between the parties. Of disputes arising out of service territory agreements, all but one were resolved short of litigation. One service territory agreement requires binding arbitration in the event of dispute.
- Four service territory agreements deal with stranded cost recovery.
- One IOU and cooperative defined areas in which they would compete; stated rules for competing with each other; and allowed large industrial customers to choose providers without regard for boundaries.

# Part 2 – Entry to Energy Industry I1. Natural gas – Gathering and supply



- Natural gas supply is an inherently competitive industry, with thousands of small producers and relatively easy economic entry.
- Bad decisions by US Congress, US Supreme Court, about entry regulation meant gas supplies and pipelines were regulated as monopolies from 1935 to 1985, contributing to natural gas shortages.
- The Federal Energy Regulatory Commission (FERC) finally solved problems with Orders 436 (1985), 500 (1988), and 636 (1992).

# Part 2 – Entry to Energy Industry I2. Natural gas – FERC restructuring



- Orders 436 and 500 (1985-88) articulated an "open access" policy, which enabled utilities and industrial customers to purchase gas directly from pipelines or upstream suppliers.
- This changed the nature of the "core" customer base (residential and small commercial), and led to the development of an independent marketing industry which now competes with LDCs and pipelines to arrange supply and transportation services.
- Order 636 (1992) accomplished the regulatory structure recommended almost 60 years before: pipelines became common carriers, with the gas supply business separated from pipeline subsidiaries.
- Order 636 also set up a secondary market for releasing pipeline capacity.

# Part 2 – Entry to Energy Industry I3. Natural gas – supply



- Gas wells and gathering facilities are regulated by state or provincial governments in gas producing regions (e.g. Oklahoma, Texas, Louisiana, California, New Mexico, British Columbia, Alberta).
- Entry standards differ from state to state.
- Example: British Columbia natural gas drilling entry laws include:
  - Encouraging gas drilling as an economic development strategy, so minimizing barriers to entry,
  - Requirements to work with native tribes,
  - Strict permit requirements about working on tundra and permafrost.

### Part 2 – Entry to Energy Industry J1. Natural gas – Interstate Pipelines



- Interstate gas pipelines and gas storage must obtain certificates of convenience and necessity from FERC.
   Pipelines are regulated as common carriers.
- FERC natural gas certificate processes include consulting with stakeholders, identifying environmental issues, and preparing environmental documents such as Environmental Assessments or Environmental Impact Statements.
- Certificates are issued by FERC order.
- Reference: <a href="http://www.ferc.gov/industries/gas.asp">http://www.ferc.gov/industries/gas.asp</a>

### Part 2 – Entry to Energy Industry J2 Interstate Pipelines – FERC process 1



#### FERC's traditional certificate process has three parts:

#### 1. Applicant's Planning Process

- A. Hold open season to determine market needs
- B. Select proposed pipeline route
- C. Identify landowners
- D. Start easement negotiations
- E. Hold public meetings
- F. Start surveys, complete resource reports
- G. File at FERC

Reference: http://www.ferc.gov/help/processes/rev-proc.asp

### Part 2 – Entry to Energy Industry J3 Interstate Pipelines – FERC process 2



#### 2. FERC Process

- A. Notice of application issued by FERC.
- B. Determine environmental issues.
- C. FERC issues preliminary determination of need based on non-environmental factors.
- D. Issue Environmental Assessment (EA) or draft Environmental Impact Statement (EIS).
- E. Resolve environmental issues and respond to environmental comments.
- F. Issue final EA or EIS.
- G. FERC issues order granting certificate.

### Part 2 – Entry to Energy Industry J4 Interstate Pipelines – FERC process 3



#### 3. Construction Process

- Finalize project design.
- File plans, surveys, and information required prior to construction by FERC order.
- Complete right-of-way acquisition.
- Pipeline construction.
- Right-of-way restoration.
- PROJECT IN SERVICE

Once the pipeline is complete, safety jurisdiction transfers to US Department of Transportation Office of Pipeline Safety.

# Part 2 – Entry to Energy Industry K1. Retail gas distribution in WA



- Gas retail distribution companies in Washington must obtain certificate from the UTC that the public convenience and necessity requires such operation. RCW 80.28.190
- Certificates are not exclusive, as they do not preclude private parties from building delivery facilities for their own use, and do not preclude a utility from operating in another utility's service territory if the incumbent utility is providing inadequate service.
- UTC does not have jurisdiction over interstate pipeline facilities built to serve large industrial customers, i.e. "spur" or "lateral" pipelines from the interstate pipeline.

# Part 2 – Entry to Energy Industry K2. Gas certificates



- Gas companies file documentation with the UTC to support certificate requests, but precise information can vary from company to company:
- Examples of documents in certificate application include:
  - Cover letter.
  - Maps and legal description of existing and proposed service areas.
  - Economic feasibility study of proposed service (may be confidential).
  - Public requests and need for service (may be confidential).
  - Copy of federal financial reports (e.g. Form 10-Q).
  - Branch offices, officers, and largest shareholders.
  - Copies of existing local government street franchises.
  - Proposed UTC order approving the certificate.