

# 49<sup>TH</sup> ANNUAL TAXATION CONFERENCE

## *Why Rate Based Regulated Utilities Don't Earn Their Cost of Capital*

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## Does it matter?

# Regulated Rate Base

# Appraisal Net Book Value

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## DEFINITION OF RETURN UNDER COST OF SERVICE RATEMAKING FEDERAL ENERGY REGULATORY COMMISSION

1. "The Return that we include in a pipeline's cost-of-service represents the **After Tax Return**. The Return includes an amount which provides a return on the pipeline's equity investment, as well as including an amount to recover the interest on a pipeline's debt. That is, it represents the amount of profit we are permitting the company to earn, after payment of all of its expenses (except interest on long term debt), including taxes, allowed in the cost of service."

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# LEGAL DEFINITION COST OF CAPITAL RETURN US SUPREME COURT

1. "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management to maintain and support its credit and enable it to raise money necessary for the proper discharge of its public duties."
2. "The return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risk."

1. Bluefield Water Works vs PSC of WV (1932)
2. Federal Power Commission vs Hope Natural Gas Co. (1944)

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## HISTORY



- Deregulation
- Marketing
- Wholesale
- Open Access

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## REGULATED UTILITY RISK



- Regulatory
- Business
- Financial
- Property Specific

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## REGULATORY RISK

### **Regulatory Lag**

The majority of pipelines' regulatory bodies structure the companies' earnings on the investment in tangible assets ("rate base") used to service their customers, resulting in an "allowed rate of return", "allowed depreciation rates", etc. This "rate base" regulation prohibits a company from changing its rates without a request, formal hearing, and decision; which could take years to culminate. This creates a "regulatory lag" which could negatively impact the companies' pricing, allowed rate of return, etc.

### **Cost Recovery**

Construction costs that incur significant overruns above rate base used to determine FERC tariffs on long term contracts.

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## FINANCIAL RISK

Debt Ratio  
FERC Form 2 Major Natural Gas  
Companies (YE 2016):

**Total Debt to Equity**

- Median: 35.09%
- Average: 49.27%

Bond Ratings  
Publicly Traded Bonds (YE 2016):

- Median Rating: BBB-
- Average Rating: BB+



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## BUSINESS RISK

**Competitive Market Conditions**

- 2018 saw the most pipeline projects in decades (14 FERC Projects – Approx. \$23 Billion)
- For comparison – There are 3 FERC projects scheduled for 2019 @ about \$4 Billion

**Weather Related**

- Cooler than normal summer/warmer than normal winter

**Bankruptcies**

- West Coast

**Renewables**

- Greater percentage of electricity coming from renewables (Expected to surpass coal in 2021)

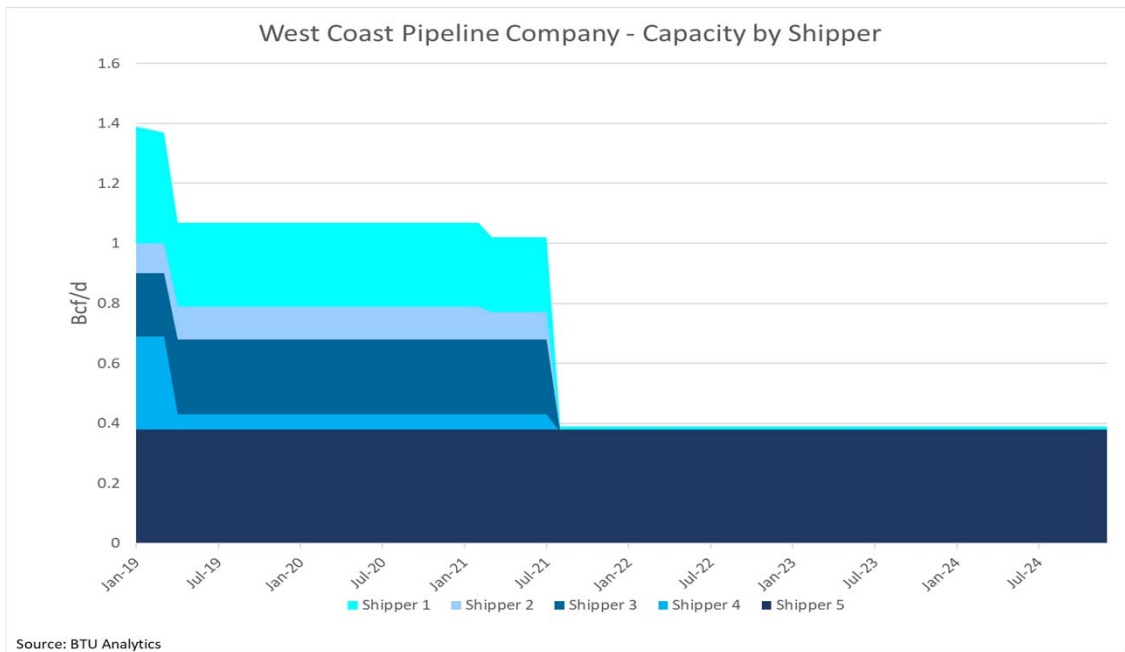
**Regulatory / Environmental**

- Stricter oversight and involvement

**Market Changes**

- Commodity price, Marcellus Shale, Traditional direction of flow

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## EXTERNAL/ECONOMIC OBSOLESCENCE

1. "The loss in value or usefulness of a property caused by factors external to the property."

Not to be confused with book (or FERC) depreciation...

Book (or FERC) Depreciation is an allocation of cost, not value; at no point in the derivation of depreciation rates is there any assessment of value of the pipeline or its assets.

**FERC FORM 2 MAJOR  
NATURAL GAS  
COMPANIES  
RATE OF RETURN ON  
NET PLANT**

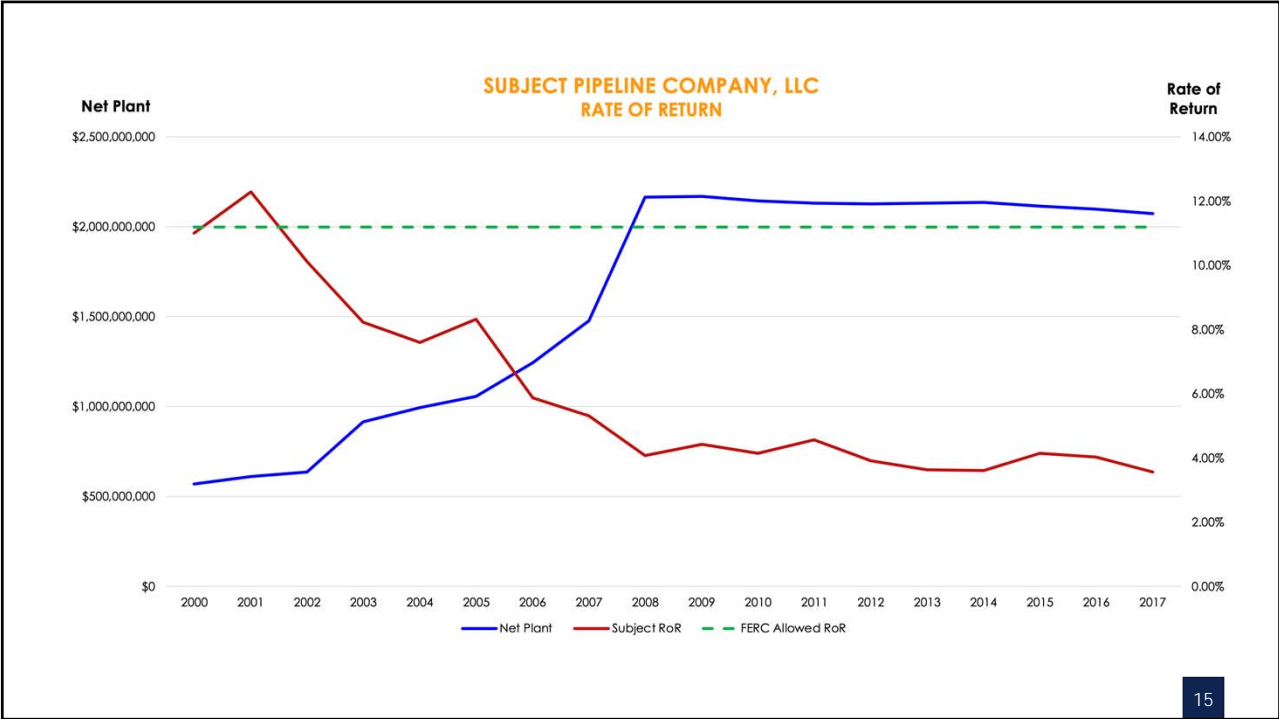
**UTILITY PLANT OF \$2 BILLION - \$4 BILLION**

<b>Company</b>	<b>RoR</b>
Pipeline 1	21.19%
Pipeline 2	9.46%
Pipeline 3	8.58%
Pipeline 4	4.58%
Pipeline 5	9.93%
Pipeline 6	4.64%
Pipeline 7	3.52%
Pipeline 8	6.79%
Pipeline 9	5.57%
Pipeline 10	8.74%
Pipeline 11	8.32%
Pipeline 12	10.39%
Pipeline 13	8.47%

**FERC FORM 2 MAJOR  
NATURAL GAS  
COMPANIES  
RATE OF RETURN ON  
RATE BASE**

**UTILITY PLANT OF \$2 BILLION - \$4 BILLION**


<b>Company</b>	<b>RoR</b>
Pipeline 1	20.83%
Pipeline 2	11.74%
Pipeline 3	10.49%
Pipeline 4	5.59%
Pipeline 5	12.74%
Pipeline 6	5.65%
Pipeline 7	4.32%
Pipeline 8	8.85%
Pipeline 9	6.61%
Pipeline 10	9.89%
Pipeline 11	9.99%
Pipeline 12	10.63%
Pipeline 13	9.09%



	Subject Pipeline	Comparable Pipeline
	2017 FERC	2017 FERC
Utility Plant	\$2,790,825,595	\$3,635,296,931
CWIP	\$7,422,903	\$14,511,645
Total Utility Plant	\$2,798,248,498	\$3,649,808,576
Accumulated Depreciation	\$723,507,230	\$1,669,576,700
Net Utility Plant	\$2,074,741,268	\$1,980,231,876
Net Operating Income	\$74,015,868	\$213,484,724
Rate of Return	3.57%	10.78%



## DEPRECIATION RATE



	Subject Pipeline	Comparable Pipeline
	2017 FERC	2017 FERC
Indicated Composite Depreciation Rate	1.15%	2.43%

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## SOURCES

1. An Introduction to Utility Cost of Capital
2. Timeline and History of Energy Deregulation in the United States
3. What Electric Utilities Are Doing about Regulatory Lag
4. Deregulation of the Natural Gas Industry

1. California Public Utilities Commission Policy & Planning Division April 18, 2017
2. <https://www.electricchoice.com/blog/timeline-history-energy-deregulation/>
3. <http://www.valueline.com/Stocks/Commentary.aspx?id=13098>
4. <https://fee.org/articles/deregulation-of-the-natural-gas-industry/>

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