

AOPL Workshop

Regulatory Basics for Oil Pipelines

September 16, 2009

Discussion Outline

- Part I: Who regulates oil pipelines?
- Part II: Procedures for filing tariffs.
- Part III: The two major rate-setting methodologies.

Part I

Federal Energy Regulatory Commission

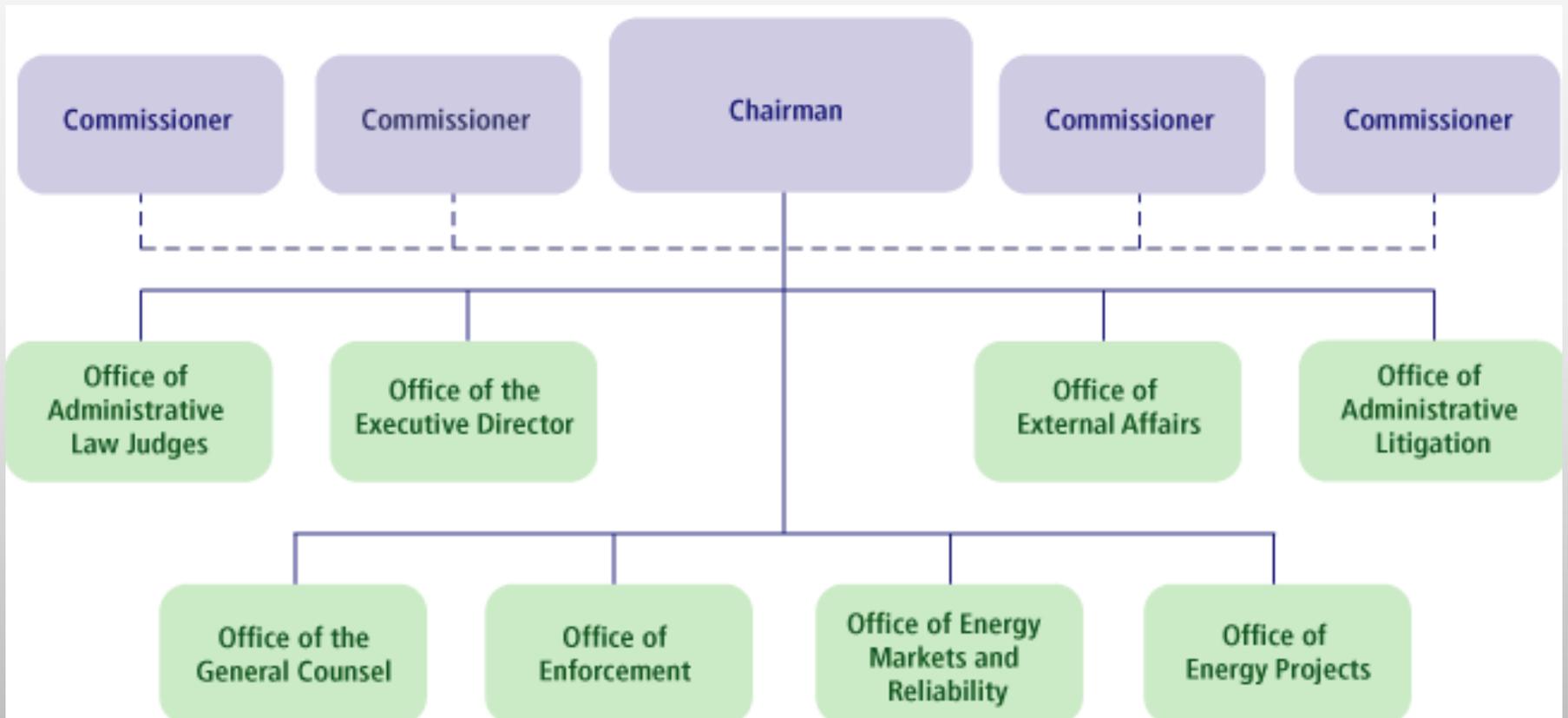
The federal authority
responsible for
regulating oil pipelines

FERC

Introduction

- Also regulates the electric, hydro, gas industries.
- Part of the Executive Branch.
- An independent agency.
- Extensive Congressional oversight.
- Funded by the fees charged to the entities it regulates
- As of 2009, regulated 141 oil pipelines.
- FERC departments important to oil pipeline industry:
 - Office of Energy Markets & Reliability
 - Office of Enforcement
 - Office of Administrative Litigation

FERC Organizational Chart



FERC

Commissioners as of Sept. 2009



**Jon
Wellinghoff
Chairman**
D

**Sudeen
Kelly**
D

**Philip
Moeller**
R

**Marc
Spitzer**
R

FERC

Commissioners

- Appointed by the President with the consent of the Senate.
- Serve 5-Year Terms.
- Equal vote on regulatory matters.
- No more than 3 Commissioners of the same political party.

FERC

Office of Energy Markets & Reliability

- Principal advisor to the Commission on regulatory issues.
- Oversees energy market structure and performance.
- Oversight of compliance of market participants with the Commission's rules.
- Conducts analytical studies of energy markets.
- OEMR Division Key to Oil Pipelines:
 - Division of Tariffs and Market Development (Central Group)
 - 1 of 6 divisions under OEMR

FERC

Tariffs and Market Development (Central Group)

- Analyzes oil pipeline tariff and rate change filings.
- Advises Commission on filings, initial decisions, rehearings, complaints, & declaratory orders.
- Directs companies to perform oil pipeline statutory depreciation studies.
- Analyzes oil pipeline market-based rate applications.
- Often assists pipelines in complying with regulations (e.g. ensuring tariffs meet all of the pertinent requirements).

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Office of Enforcement

- Oversees compliance of market participants with the Commission's rules for market activity.
- Reports on the state of the energy markets, analyzing market activities and trends.
- Advises the Commission on accounting and financial matters affecting energy markets.
- Oversees compliance with the Uniform System of Accounts.
- OE Divisions Key to Oil Pipelines:
 - Division of Financial Regulation
 - Division of Audits

FERC

OE: Division of Financial Regulation

- Provides guidance to the Commission concerning its financial accounting
- Reviews new or proposed accounting standards made by authoritative accounting bodies to determine effect on regulated industries.
- Prepares and coordinates necessary revisions and/or amendments to the Commission's Uniform System of Accounts.
- Administers financial forms Nos. 1, 2, 2-A, 6, 3Q, 6Q, etc.

FERC

Form No. 6

- **What is the Form 6?**
Required Annual Report of Oil Pipeline Companies who are regulated by the Federal Energy Regulatory Commission as set forth in the Interstate Commerce Act
- **Who uses the Form 6?**
FERC and Other Regulatory Commissions, Shippers, Carriers, AOPL, Bureau of Economic Analysis
- **Purpose of the Form 6:**
To collect comprehensive financial and operational information about oil pipeline companies subject to the jurisdiction of the FERC
 - General Corporate Information
 - Financial Statements
 - Plant Statistical Data
 - Allowed Cost-of-Service (Page 700)
- **Filing Dates**
 - Year-End (Form 6)- April 18th
 - Quarterly (Form 6-Q) (70 days after the quarter ends)

FERC

OE: Division of Audits

- **Performs financial and operational audits of industry participants.**
 - **Performs audits on a random basis.**
 - **Authority to audit all FERC regulation related records**
- **Represents the Commission and explains and advocates its legal and policy positions.**
- **Advises the Commission on compliance related matters.**

FERC

Offices Involved in Rate Cases

- **Office of Administrative Litigation (OAL)**
 - Resolves disputes through settlement.
 - Litigates unresolved issues at hearing.
 - Commission Staff and lawyers represent the public interest.
- **Office of Administrative Law Judges (OALJ)**
 - Resolves contested cases as directed by the Commission, either through impartial hearing and decision or through negotiated settlement.
 - Conducts fair and impartial investigations as directed by the Commission.
 - Performs various alternative dispute resolution (ADR) as directed by the Commission.

Part II

Rate-Setting Procedures

Initial Rates

Indexed Rates

Grandfathered Rates

Settlement Rates

Market-Based Rates

Cost-of-Service Rates

Rate-Setting Procedures

Introduction

- **Where are regulations pertaining to oil pipelines located?**
 - Code of Federal Regulations, Title 18 - Conservation of Power and Water Resources (CFR 18)
 - FERC & DOE regulations: Volume I, parts 1 to 399.
 - Chapters pertinent to oil pipelines:
 - Subchapter P – Regulations under the Interstate Commerce Act (ICA), Parts 340-350
 - Subchapter Q – Accounts under the ICA, Parts 351-352
 - Subchapter R – Approved Forms, ICA, Parts 356-357
- **Where are regulations specific to tariff filings located?**
 - 18 C.F.R. § 340
 - Tariffs must be filed 30 days prior to taking effect, 18 C.F.R. §341.2
 - Neither the filing date nor the effective date are counted in the 30 days
 - Short notice exception
 - Tariff must be formatted in conformance with regulations, 18 C.F.R. §341.3

Tariff Rate Types

Initial Rates (18 C.F.R. §342.2)

- A carrier must justify an initial rate for a new service by:
 - a) Filing a cost-of-service to support such rate, or
 - b) Filing a sworn affidavit that the rate is agreed to by at least one non-affiliated shipper who intends to use the service in question (a negotiated rate).

Tariff Rate Types

Indexed Rates 18 C.F.R. §342.3

- A rate may be changed, at any time, to a level not to exceed the ceiling level.
- The current period ceiling level equals the product of the previous index year's ceiling level and the most recent index published by the Commission.
- Index published prior to June 1 of each year.

Tariff Rate Types

Grandfathered Rates

- Section 1803(a) of the Energy Policy Act of 1992 (“EPAAct”) deems just and reasonable “any rate in effect for the 365-day period ending on the date of the enactment of this Act ... if the rate in effect... has not been subject to protest, investigation or complaint during such period.
- A grandfathered rate can be challenged if:
 - “a substantial change has occurred after” October 24, 1992, “in the economic circumstances of the oil pipeline which were a basis for the rate,” or
 - “a substantial change has occurred after” October 24, 1992, “in the nature of the services provided which were the basis of the rate.”

Tariff Rate Types

Settlement Rates 18 C.F.R. §342.4

- A carrier may change a rate without regard to the ceiling level if the proposed change has been agreed to, in writing, by each person who, on the day of the filing of the proposed rate change, is using the service covered by the rate.

Tariff Rate Types

Market-Based Rates 18 C.F.R. §342.3

- Carrier must demonstrate that it lacks significant market power in the in the origin market and the destination market.
- Filing requirements established in 18 C.F.R. §348.
- These filing requirements require a relatively lengthy application.
- If the application is approved, the carrier may set rates at whatever level the market will bear.
- Chris Lyons and I will be giving a presentation discussing market-based rates in significant depth at XX

Tariff Rate Types

Cost-of-Service Rates 18 C.F.R. §342.4

- Carrier must show that there is a substantial divergence between the actual costs experienced by the carrier and the rate resulting from the application of the index such that the rate at the ceiling level would preclude the carrier from being able to charge a just and reasonable rate within the meaning in the Interstate Commerce Act.
- Filing requirements established in 18 C.F.R. §346
- More on cost-based rates to come...

PART III

Cost-of-Service Rates

Cost-of-Service

Introduction

- Types of Cost-of-Service Methodologies:
 - Depreciated Original Cost (“DOC”)
 - Trended Original Cost (“TOC”)
- COS Methodology Prescribed by the Commission: The Opinion No. 154-B Cost-of-Service Methodology
 - Issued June, 1985
 - Utilizes a TOC rate base
 - Has been modified and clarified by subsequent decisions.

Cost-of-Service

Depreciated Original Cost

Operating Expenses

+ Return of Rate Base (Depreciation)

+ Return on Rate Base

+ Amortization of Allowance for Funds Used
During Construction (“AFUDC”)

+ Income Tax Allowance

= **Cost of Service (Revenue Requirement)**

Cost-of-Service Operating Expenses

- Salaries and Wages
- Materials and Supplies
- Outside Services
- Fuel and Power
- Pensions and Benefits
- Insurance
- Oil Losses and Shortages
- Taxes other than Income Taxes
- Allocated Overhead

Allocated Overhead

- For pipelines that are subsidiaries of a larger corporation, allocated overhead can represent a significant component of the COS.
- The Commission generally uses a three factor approach consisting of revenue, plant and payroll to allocate overhead.
- Other approaches are permissible.
- The critical issue is that the allocation methodology match cost with causation.

Cost-of-Service Depreciation

- Depreciation Example:
 - Beginning of Year 1 Rate Base = 1000
 - Estimated Life = 20 years
 - Year 1 Depreciation Expense = $(1000 / 20) = 50$
- Group Method of Depreciation: a number of similar or related assets are included in a group to which a single composite depreciation rate is applied.

Cost-of-Service Rate Base

- Carrier Property in Service
- Accumulated Depreciation
- + Allowance for Funds Used During Construction
("AFUDC")
- Accumulated Amortization of AFUDC
- + Working Capital Allowance
- Accumulated Deferred Income Taxes ("ADIT")
- = **DOC Rate Base**

Cost-of-Service

Accumulated Deferred Income Tax

<u>Calculation of ADIT</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Tax Depreciation	33.3	33.3	33.3	-
Book Depreciation	25.0	25.0	25.0	25.0
Timing Difference	8.3	8.3	8.3	(25.0)
Deferred Income Taxes	<u>4.2</u>	<u>4.2</u>	<u>4.2</u>	<u>(12.5)</u>
ADIT	4.2	8.3	12.5	-

Assumptions

Property	100
Book Depreciation	25%
Tax Depreciation	33%
Income Tax Rate	50%
Equity %	100%
ROE	10%

Cost-of-Service Return on Rate Base

$$\begin{aligned} & \text{Debt \%} \times \text{Cost of Debt} \\ + & \text{ Equity \%} \times \text{Nominal Equity Rate of Return} \\ = & \text{ **Weighted Cost of Capital** } \end{aligned}$$

$$\begin{aligned} & \text{Average DOC Rate Base} \\ \times & \text{ Weighted Cost of Capital } \\ = & \text{ **Return on DOC Rate Base** } \end{aligned}$$

Cost-of-Service Allowance for Funds Used During Construction

$$\begin{aligned} & \text{Average Monthly Construction Work in Progress ("CWIP")} \\ & \text{Balance} \\ & \times \text{ Weighted Cost of Capital } \\ & = \text{ AFUDC } \end{aligned}$$

$$\begin{aligned} & \text{Average AFUDC Balance} \\ & \times \text{ Useful Life Factor } \\ & = \text{ Amortization of AFUDC } \end{aligned}$$

Cost-of-Service Income Tax Allowance

$$\begin{aligned} & \text{Equity Portion of Return on DOC Rate Base} \\ + & \text{ Amortization of Equity AFUDC } \\ = & \text{ Taxable Elements of Return} \\ \times & \text{ Net-to-Tax Multiplier } \\ = & \text{ **Income Tax Allowance** } \end{aligned}$$

$$\begin{aligned} & \text{Income Tax Rate}^* \\ \div & \text{ (1.0 - Income Tax Rate) } \\ = & \text{ **Net-to-Tax Multiplier** } \end{aligned}$$

*Generally based on the statutory marginal tax rate for corporations

Cost-of-Service

DOC Recap

Operating Expenses

- + Return of Rate Base (Depreciation)
- + Return on Rate Base
- + Amortization of Allowance for Funds Used During Construction (“AFUDC”)
- + Income Tax Allowance
- = **Cost of Service (Revenue Requirement)**

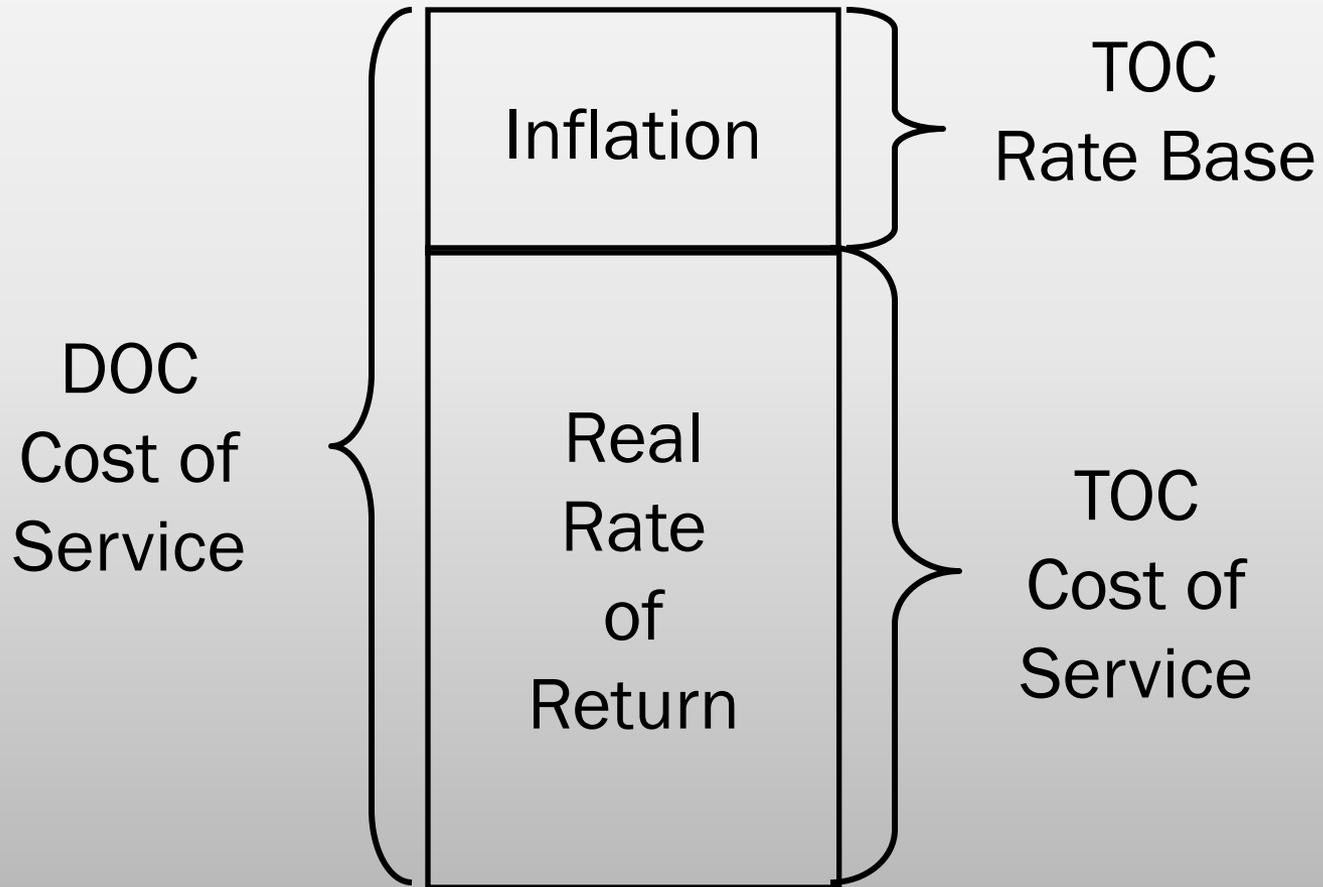
Cost-of-Service

Trended Original Cost (TOC)

- Variation of DOC.
- Stores inflation adjustment in Rate Base and recovers as “Deferred Return” over life of assets.
- Applies Real Return on Equity (“ROE”)1/ to “equity” portion of Rate Base and Cost of Debt (“COD”) to debt portion of Rate Base.
- Trends portion of Rate Base funded by equity to reflect inflation as measured by the CPI-U.

Cost-of-Service

Nominal Equity Rate of Return



Cost-of-Service Calculation & Amortization of Deferred Return

$$\begin{aligned} & \text{Trending Base (Equity Rate Base)} \\ & \underline{\times \text{ Inflation Factor}} \\ & = \text{Deferred Return} \end{aligned}$$

$$\begin{aligned} & \text{Deferred Return} \\ & \underline{\times \text{ Useful Life Amortization Factor}} \\ & = \text{Amortization of Deferred Return} \end{aligned}$$

Cost-of-Service

Opinion No. 154-B

- Issued June of 1985.
- Adopts the trended original cost rate base (“TOC”) for oil pipelines wishing to establish or change their tariff rates by filing a cost-of-service.
- Provides for a transition from the previous valuation rate base methodology, referred to as the “starting rate base,” (“SRB”).
- Advocates use of the pipeline’s actual capital structure.
- Case-by-case determination of many issues.

* FERC Opinion No. 154-B, as modified and clarified by subsequent decisions

Cost-of-Service Starting Rate Base

- Intended to provide transition from prior methodology.
- One-time calculation as of December 31, 1983.

- SRB Formula:

$$\begin{aligned} & (\text{Debt \%} \times \text{Net Original Cost}) \\ & + \underline{(\text{Equity \%} \times \text{Net Reproduction Cost New})} \\ & = \text{Starting Rate Base} \end{aligned}$$

$$\begin{aligned} & \text{Starting Rate Base ("SRB")} \\ & - \underline{\text{DOC Rate Base}} \\ & = \text{SRB Write-Up} \end{aligned}$$

Cost-of-Service

Starting Rate Base Write-Up

- SRB Write-Up is included in Opinion No. 154-B Rate Base.
- SRB Write-Up is amortized.
- Amortization of SRB Write-Up is excluded from Cost of Service.
- Carrier's Return On Rate Base includes a return on the unamortized SRB.
- SRB Write-Up is included in Trending Base when computing Deferred Return.

Cost-of-Service Rate Base Components

$$\begin{aligned} & \text{DOC Rate Base} \\ + & \text{SRB Write-Up} \\ & - \text{Accumulated Amortization of SRB Write-up} \\ + & \text{Deferred Return} \\ & - \text{Accumulated Amortization of Deferred Return} \\ \hline = & \text{154-B TOC Rate Base} \end{aligned}$$

Cost-of-Service Income Tax Allowance

Equity Portion of Return on TOC Rate Base
+ Amortization of Deferred Return
= Subtotal
x Net-to-Tax Multiplier
= **Income Tax Allowance**

Cost-of-Service

Base & Test Periods

- A base period must consist of 12 consecutive months of actual experience adjusted to eliminate non-recurring items. Carrier may include appropriate normalizing adjustments in lieu of non-recurring items.
- A test period must consist of a base period adjusted for changes in revenues and costs which are known and measurable with reasonable accuracy at the time of filing and which become effective within nine months after the last month of available actual experience utilized in the filing. For good cause shown, the Commission may allow reasonable deviation from the prescribed test period.
- See 18 C.F.R. §346.2.

Critical Take-Aways on COS

- The calculations contain a number of variables that function in tandem.
- Some of the required inputs involve data going back over 25 years.
- The higher the quality of the data the more successful a cost-based rate filing will be.

Questions?