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National Energy Board

Office national de l'énergie

Pipeline Tolls and Tariffs: A Compendium of Terms

January 1995

Canada

This information bulletin provides general explanations of the terms commonly used in the regulation of pipeline tolls and tariffs under Part IV of the National Energy Board Act.

THE BOARD

The National Energy Board is an independent regulatory tribunal that was created by the Parliament of Canada in 1959. Its powers and jurisdiction are based on the National Energy Board Act, the Canada Oil and Gas Operations Act and certain provisions of the Canada Petroleum Resources Act. The purpose of the Board is to make decisions that are fair, objective, and respected. The Board achieves this purpose by regulating in the Canadian public interest certain areas of the oil, gas, and electric utility industries. Copies of the Acts are available from the Board and from the Canada Communications Group, Public Works and Government Services Canada, 45 Sacré-Coeur Blvd., Hull, Quebec, K1A 0S7.

PUBLICATIONS

This information bulletin is one of a series that the Board publishes on its activities and procedures. Comments on this bulletin or suggestions for future topics are welcome. These bulletins provide general information only. For details of particular items, reference must be made to the relevant legislation.

BULLETINS IN THIS SERIES

1. Pipeline Route Approval Procedures
2. The Public Hearing Process
3. Non-Hearing Procedures
4. How to Participate in a Public Hearing
5. The Board's Publications
6. The Regulation of Tolls and Tariffs
7. The National Energy Board Library
8. Electric Power: A Compendium of Terms
9. Protection of the Environment
10. Pipeline Tolls and Tariffs: A Compendium of Terms
11. The Frontier Information Office
12. Pipeline Safety
13. Pipeline Regulation: An Overview for Landowners and Tenants

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Pipeline Tolls and Tariffs: A Compendium of Terms

This bulletin provides a general explanation of the terms and expressions commonly used in the course of hearings under Part IV of the *National Energy Board Act* (the Act) concerning tolls and tariff matters and in Reasons for Decision documents. The objective is to promote a better understanding of the National Energy Board's proceedings by the public. Accordingly, certain explanations have been deliberately simplified. They neither replace nor interpret terms defined in the Act or regulations.

Another Information Bulletin (No. 6) treats the Board's approach to the regulation of tolls and tariffs under Part IV of the Act.

Terms Are Listed Alphabetically

Allowance for Funds Used During Construction (AFUDC) An amount allowed as compensation to the company for the cost of funds used during the period of construction, when a utility undertakes to construct its own facilities. The amount of the allowance is included in the total capitalized cost of the asset and is depreciated over the life of the asset after it is placed in service. AFUDC is similar to "Interest During Construction" for unregulated industries except that, in determining AFUDC, the cost of equity capital is normally taken into account.

Amortization A systematic writing-off of an amount over a period of time.

Average Service Life (ASL) Depreciation A group method of depreciation whereby the rate of annual depreciation is based on the average service life or average remaining service life of the group. This rate is applied to the surviving balances of the asset group's costs.

Base Year or Base Period A historical period (usually 12 consecutive months), for which actual data is available, used as the starting point in determining tolls for a future test year. (See Test Year).

Basis Point One one-hundredth of a percentage point, used in reference to interest rates or return on equity. The spread between 10.0% and 10.15% is 15 basis points.

Beta Factor The measure of the systematic risk of a security or the tendency of a security's returns to respond to swings in the broad market. (See Capital Asset Pricing Model (CAPM)).

Bond A debt security issued by a borrower that obligates the issuer to make specified payments to the holder over an established period.

Bond Rating A quality rating assigned by rating agencies to the debt issues of a government or business as an indication of creditworthiness. In Canada, the two major bond rating agencies are the Dominion Bond Rating Service (DBRS) and the Canada Bond Rating Service (CBRS). Typical ratings range from AAA (DBRS) or A++ (CBRS) representing bonds of the highest investment quality down to C for bonds of the lowest quality.

Book Value The amount at which an item appears in the books of account and financial statements.

Business Risk The risk attributed to the nature of a particular business activity (as distinct from financial risk). For instance, a pipeline which provides an essential service under a monopoly would have a smaller business risk than a resource exploration venture.

Capital The total funds invested in a company by lenders (debt capital) and by owners (equity capital).

Capital Asset Pricing Model (CAPM) One of several methods used to estimate the cost of equity capital by comparing the return and risk characteristics for an individual company's shares to the average for all shares in the market. The relative volatility of the return on a company's shares relative to the market average is generally referred to as the "Beta factor". A share with a Beta factor greater than one fluctuates more than the market average and is therefore considered to be of higher risk and possibly more rewarding than the market average.

Capital Cost Allowance (CCA) An income tax deduction allowed for certain fixed assets used in operating a business. CCA is similar in nature to depreciation used for accounting purposes; however, the rates allowed are prescribed by income tax regulations and are not intended to reflect an asset's useful service life.

Capital Structure The way in which a business is financed. It is generally expressed as a percentage breakdown of the types of capital employed. For example, a utility could have a capital structure of 50% debt, 15% preferred shares, and 35% common equity.

Capitalization Capital structure expressed in dollar amounts.

Capitalized Overhead or Cost of Overhead During Construction The amount of a company's overhead expenditures allocated to the cost of acquisition or construction of an asset. The total cost of the asset, including capitalized overhead, is depreciated over the asset's life.

Cash Working Capital The amount of cash needed to allow for the time lag between the payment of ongoing operating expenses and the collection of corresponding revenues. (See Lead-Lag Study and Working Capital).

Commodity Charge A charge applied to volumes actually taken in order to recover the variable costs of a pipeline. (See Demand Charge).

Common Carrier One who provides transportation for remuneration without discrimination among customers. Service must normally be provided on demand when capacity is available. When demand exceeds available capacity, it is allocated to customers in proportion to the demand.

Common Equity The book value of a company's common shares outstanding including retained earnings or net of accumulated deficits.

Common Equity Ratio The ratio of the common equity to the total capital of a company.

Comparable Earnings Test A comparison of the rates of return earned by companies with similar investment risk to that of a utility's regulated operations. This is one of several methods used to estimate the appropriate rate of return on common equity for the utility.

Compliance Audit An audit undertaken to determine whether a company is complying with legal or contractual provisions relating to its accounts, or with rules, regulations, and prescribed procedures. In the case of a company regulated by the Board, a compliance audit would primarily include the examination of the company's accounts to ascertain whether the company is complying with the Uniform Accounting Regulations and any orders issued by the Board.

Contract Carrier One who provides transportation for remuneration to customers who have contracted for the service over a specific period.

Cost of Common Equity Capital The return on common equity required by investors.

Cost of Debt Capital The effective interest rate for a company's debt capital. (See Capital and Embedded Debt Cost).

Cost of Preferred Equity Capital The effective yield on a company's preferred shares.

Cost of Service The total cost of providing service, including operating and maintenance expenses, depreciation, amortization, taxes, and return on rate base. Generally, the cost of service of a pipeline is the same as its revenue requirement.

Cross-Subsidization The charging of tolls which favours one class of customers at the expense of another, the provision of financial support to a company's non-regulated activities by its regulated operations, or vice versa.

Debenture A long-term corporate debt obligation that is not secured by any specific asset of the company, but rather is based on the company's general creditworthiness.

Deemed Capital Structure A capital structure used for ratemaking purposes that differs from a company's actual capital structure. A regulator could deem a capital structure:

a. when the equity ratio in the actual capital structure of the utility company varies significantly from those of other companies having similar business risks; or

b. when the actual capital structure for utility activities cannot be readily determined because of the inclusion of significant non-utility activities.

Deferral Account For regulatory purposes, generally, a type of account used to record revenues and expenses held in abeyance for future disposition by a regulator.

Deferred Income Taxes The amount by which income taxes determined on the basis of accounting income exceeds income taxes payable. In a utility company, this amount results primarily when capital cost allowance used in calculating taxable income is larger than corresponding depreciation used in calculating accounting income. Deferred income taxes are carried on the balance sheet of a company as a non-current liability. (See Normalized Income Taxes, Flow-through Income Taxes, and Capital Cost Allowance).

Demand Charge A monthly charge which normally covers the fixed costs of a pipeline. The demand charge is based on the daily contracted volume and is payable regardless of volumes transported.

Dilution of Equity The reduction in book value per share caused by the issuance of additional shares at less than the book value per share of existing shares.

Discounted Cash Flow (DCF) Model for Return on Equity One of the methods used for estimating the cost of common equity based on the current dividend yield of a company's shares and the expected future earnings growth rate.

Double Leveraging When a company having debt in its own capitalization makes an equity investment in another company which also has debt included in its capital structure, the investment is referred to as having "double leverage".

Embedded Debt Cost The actual cost of long-term debt outstanding.

Equal Life Group (ELG) Depreciation A group method of depreciation whereby property groups are subdivided according to service life (i.e. each equal life group includes property with the same life span) thus eliminating the need to base depreciation rates on the average service life of the assets.

Equity Capital The total of preferred and common equity. (See Common Equity and Preferred Equity).

Equity Risk Premium of Common Shares The spread reflecting the difference in risk associated with holding common equity as opposed to debt or preferred shares. The cost of common equity capital is usually greater than the cost of debt or preferred shares.

Equity Risk Premium (ERP) Model One of the methods used for estimating the cost of common equity. This model is based on the premise that an investment in common equity carries greater risk than an investment in either debt or preferred stock and, therefore, requires a higher return, or premium, over that required for bonds or preferred shares.

Extraordinary Retirement A retirement of a depreciable asset that results from circumstances not foreseen when determining the asset's service life for depreciation purposes.

Financial Leverage The proportion of debt in relation to equity in a utility's capital structure. The higher the long-term debt, the greater the financial leverage. Shareholders benefit from financial leverage to the extent that return on the borrowed money exceeds the interest costs and that shares rise in market value. Leverage also means required interest and principal payments and thus, ultimately, the risk of default (higher financial risk).

Financial Risk The risk inherent in a company's capital structure. Financial risk increases as the proportion of debt increases in relation to shareholders' equity because debt interest and repayment obligations must be met irrespective of the overall profitability of the business.

Firm Transportation (FT) Service A firm (non-interruptible) gas transportation service which provides for the delivery of gas up to a specific maximum daily quantity. The shipper must pay a monthly demand charge regardless of the volumes transported and a commodity charge for the volumes actually transported. (See Demand Charge and Commodity Charge).

Fixed Assets Assets such as land, buildings, equipment, and machinery which are acquired for use in the operation of a business and are not intended for resale.

Fixed Costs Costs that remain, at least in the short run, relatively constant and do not vary with throughput. Examples are interest expense, depreciation charges, and property taxes. (See Variable Costs).

Fixed Toll A toll which does not vary with changes in throughput or expense variances. Fixed tolls are usually based on forecasts of costs and throughput for a test year. (See Variable Cost-of-Service Toll).

Flow-through Income Taxes A method of estimating income taxes payable for a period. The estimate is based on taxable income as opposed to an income tax provision based on accounting income for financial reporting purposes. (See Deferred Income Taxes and Normalized Income Taxes).

Focussed Audit An audit restricted to a particular management function or operation. (See Management Audit).

Full-time Equivalent (FTE) The equivalent of one full-time employee position in terms of the number of hours worked during a year. An FTE can be made up of allocations from different employee positions.

Gross Plant The original cost of fixed assets before deducting accumulated depreciation. (See Net Plant).

Incentive Regulation Alternatives or modification to cost of service regulation where a utility's profit is at least partly dependent on efficiency gains.

Incremental Tolls Tolls resulting from a toll design methodology that assigns capital and operating costs of new facilities to their own cost pool, separate from the costs of the existing facilities. Tolls are designed so existing shippers pay a toll reflecting the cost of service associated with existing facilities; "new" shippers pay a toll reflecting the cost of service associated with new facilities.

Incremental Transportation Cost The variable cost of transporting an additional unit of throughput. (See Fixed Costs and Variable Costs).

Interest Coverage Ratio The number of times that the net income for a given year, before interest expense and income taxes, covers the annual interest expense. This ratio is one measure of the creditworthiness of a company. The higher the coverage ratio, the more secure is the debt.

Intergenerational Inequity Inequity occurring when a generation of customers does not pay, at the expense of another generation, its fair share of the costs incurred by the utility in providing service.

Interim Toll Order An order authorizing a company to charge specified tolls until a final order is made, usually following a hearing. At the discretion of the Board, revised tolls may be made applicable from the date the interim tolls became effective.

Interruptible Transportation Service (IT) A gas transportation service provided on an interruptible basis. The shipper must pay a toll for the volumes actually transported.

Investment Risk The total of a company's business and financial risks. (See Business Risk and Financial Risk).

Laterals Pipelines that tie into a trunk line, generally part of either a gathering or distribution system. (See Trunk Lines).

Lead-Lag Study A study used to estimate an appropriate cash working capital allowance for inclusion in rate base. The studies estimate the average number of days between payment of ongoing operating expenses and the collection of corresponding revenues. (See Cash Working Capital).

Management Audit An audit to assess the economy, efficiency, and effectiveness of management functions and operations.

Market-to-Book Ratio The ratio of the market price of a common share to its book value.

Material Surplus to Security Items included in material and supplies inventory that are in excess of normal requirements for maintenance or the continuous operation of a pipeline.

Modified Fixed Variable (MFV) Toll Design A toll design similar to Straight Fixed Variable with the exception that certain fixed costs, for example return on equity and associated income taxes, are shifted from the demand toll to the commodity toll. (See Straight Fixed Variable Toll Design).

Negative Salvage Value The amount by which the cost of removing or mothballing an asset from service exceeds the salvage proceeds.

Negotiated Settlement An agreement between a pipeline company and interested parties concerning issues related to the company's revenue requirement, tolls, tariffs, and operational matters. In discussions leading to such an agreement, interested parties have a fair opportunity to participate and have their interests recognized and appropriately reflected. In situations where the parties are able to settle all outstanding issues and the Board is satisfied that there are no public interest considerations that extend beyond the immediate concerns of the negotiating parties, the need for a formal hearing process before the Board would normally be eliminated.

Net Plant Gross plant less associated accumulated depreciation. (See Gross Plant).

Net Proceeds Proceeds from the disposition of an asset or from the issue of securities after deducting the related expenses.

Normalized Income Taxes An estimate of income taxes based on accounting income. The estimate may vary from the income taxes payable because certain revenues and expenses are recognized for accounting at different times than they are for tax purposes. (See Deferred Income Taxes, Flow-through Income Taxes, and Capital Cost Allowance).

Part IV of the NEB Act The part of the *National Energy Board Act* dealing with all matters relating to traffic, tolls, and tariffs of oil and gas pipelines under the Board's jurisdiction.

Plant in Service The costs of fixed assets that are used in the provision of utility service. (See Rate Base).

Postage Stamp Rate For pipelines, a toll that is charged per volumetric unit transported regardless of points of origin and destination, as in postage.

Preferred Equity The book value of preferred shares outstanding.

Price-Earnings (P/E) Ratio The market price of a company's common shares divided by its earnings per share.

Rate Base The amount of investment on which a return is authorized to be earned. It usually consists of plant in service, plus an allowance for working capital. This is sometimes referred to as a "net asset rate base".

Return on Rate Base The return which a regulated company earns on its approved rate base.

Revenue Requirement The amount sought to be recovered in the tolls which will reimburse the company for its cost of service. (See Cost of Service).

Rolled-in Tolls Tolls resulting from a toll design methodology in which the capital and operating costs of new facilities are added to those of the existing facilities; i.e. there is one cost pool for all facilities. Tolls are designed to recover the annual cost of providing service. All shippers who receive the same service pay the same toll. Tolls only vary according to such factors as volume and distance.

Sinking Fund The money that must be regularly set aside according to the terms of a long-term debt or preferred share issue, in order to redeem part of the issue prior to or at maturity.

Stand-Alone Tolls Tolls that would be paid by only those shippers utilizing specific facilities or assets that are physically distinguishable from the existing facilities. They would be based on a revenue requirement independent of that calculated for the rest of the system.

Straight Fixed Variable (SFV) Toll Design A toll design whereby all fixed costs are assigned to the demand toll and all variable costs are assigned to the commodity toll.

Take-or-Pay A contract provision whereby a purchaser agrees to pay for a specified volume during a period whether or not the contract deliveries are taken.
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Tariff The terms and conditions under which the service of a pipeline are offered or provided, including the tolls, the rules and regulations, and the practices relating to specific services. (See Toll).

Tariff Levelling Ratemaking techniques used to defer costs traditionally recovered through tolls in the early years of a pipeline's life, to later years in order to level out tolls over time. (See Intergenerational Inequity).

Task Force A joint-industry task force initiated by certain pipeline companies, comprised of representatives of a pipeline company and parties in the producing, marketing, brokering, pipeline, provincial government, local distribution, and industrial end-user sectors with an interest in the services provided on that pipeline. The objective is to foster lines of direct communication, possibly leading to negotiated settlements of some issues outside the Board's adjudicative process.

Terminalling The receiving, storing, and transferring necessary for the receipt or delivery of oil in a pipeline system.

Test Year or Test Period A period (usually 12 consecutive months) used for ratemaking purposes.

Toll The price charged by a pipeline company for the use of its facilities.

Trunk Lines The main transportation lines of a pipeline system. (See Laterals).

Uniform Accounting Regulations (UAR) The accounting regulations made by the NEB for companies under its jurisdiction. There are separate Uniform Accounting Regulations for gas and oil pipelines.

Variable Costs Costs that vary with throughput, such as compressor fuel costs for gas pipelines and power costs for oil pipelines. (See Fixed Costs).

Variable Cost-of-Service Toll A toll which varies from month to month to reflect actual costs and throughput. Rules prescribed by the regulator specify which costs can be recovered, the accounting principles to be followed in determining the costs, the rate of return allowed on the investment in rate base, depreciation rates, and other parameters. (See Fixed Toll).

Working Capital For regulatory purposes, capital employed by the utility to finance its ongoing operations, in addition to the investment in Plant in Service. An allowance for working capital is included in the rate base and consists of items such as cash working capital and materials and supplies inventory. (See Cash Working Capital).

Write off The elimination of the recorded amount of an asset or liability for reasons other than the occurrence of a transaction.

13-Point Average or 13-Month Average An average determined by aggregating the balance at the opening of a year and the balances at the end of each month of the year and dividing by thirteen.