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## Ratemaking: The Mechanics of Regulation Student Symposium - Public Utility Regulation in Texas.

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## RATEMAKING: THE MECHANICS OF REGULATION

Once a governmental body attempts to regulate an industry, the governing agency must determine how the regulation will be effectuated. In the area of utilities, the method of regulation is the control of rates charged and the resulting revenues; therefore, ratemaking is a crucial element in the scheme of regulation. Without proper rate setting techniques, regulation is of little value.

The Texas Legislature realized that most areas are served by only one utility, thus resembling a monopoly; the result was the passage of the new Public Utility Regulatory Act.<sup>118</sup> The single utility operation creates a situation of potential abuse by utilities which are thrust into the role of monopolies.<sup>119</sup> Regulation attempts to prevent abuse and artificially imposes the favorable effects of a competitive market system.<sup>120</sup> As is the case with most utilities, a monopoly may be the most advantageous business form. Economies of scale are the primary factors which make a monopoly desirable,<sup>121</sup> this is because the high cost of equipment makes it more profitable to both consumers and the utility for only one firm to exist.<sup>122</sup> By recognizing that utilities are actually "natural monopolies," the legislature set the stage

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118. Tex. Laws 1975, ch. 721, § 2, at 2327-28 provides:

[T]he legislature finds that public utilities are by definition monopolies in the areas they serve; that therefore the normal forces of competition which operate to regulate prices in a free enterprise society do not operate; and that therefore utility rates, operations and services are regulated by public agencies, with the objective that such regulation shall operate as a substitute for such competition . . . .

If taken literally and interpreted to mean that the Public Utility Regulatory Act created a monopoly in each city or area, this clause could render the entire Act unconstitutional for Article I, Section 26 of the Texas Constitution states that "[m]onopolies are contrary to the genius of the free government, and shall never be allowed . . . ." Every state court and agency was specifically prohibited from creating a monopoly by *Gerst v. Cain*, 379 S.W.2d 699, 711 (Tex. Civ. App.—Austin 1964), *aff'd*, 388 S.W.2d 168 (Tex. 1965). Municipalities may create their own utility companies, but they may not vest the company with exclusive operating rights. *City of Mason v. West Tex. Util. Co.*, 150 Tex. 18, 27, 237 S.W.2d 273, 279 (1951); *Lea County Elec. Co-op, Inc. v. Plains*, 373 S.W.2d 90, 93 (Tex. Civ. App.—Amarillo 1963, writ ref'd n.r.e.). The legislature has not, however, created a monopoly. It has simply acknowledged, in the statute, that because of economic factors utilities usually do not compete for markets.

119. The power of a monopoly to set prices at a rate which is self-determined and usually higher than that of firms in a competitive economy is the primary reason for regulation. *United States v. Aluminum Co. of America*, 148 F.2d 416, 427-28 (2d Cir. 1945); *accord*, *American Tobacco Co. v. United States*, 328 U.S. 781, 813-14 (1946).

120. Tex. Laws 1975, ch. 721, § 2, at 2327-28; *accord*, *City of Chicago v. FPC*, 385 F.2d 629, 636 (D.C. Cir. 1967).

121. C. PHILLIPS, *THE ECONOMICS OF REGULATION* 21-23 (1965).

122. *Id.* at 21-23.

for regulation by the new Public Utility Commission;<sup>123</sup> proper setting of rates now becomes the most important concern.

#### RATE LEVEL

##### *Valuation Theories*

Basic to the determination of reasonable utility rates is the valuation of the utility's property, and a choice of property to be included in the rate calculations. Almost any case involving rates will include a question of whether the utility property has been properly valued. For years, there has been judicial conflict as to which of several methods is the correct and best valuation method.<sup>124</sup> Two major theories were either advanced or condemned between 1898 and 1944. The United States Supreme Court in *Smyth v. Ames*<sup>125</sup> promulgated the theory that a utility is entitled to a "fair return" on the "fair value" of property devoted to serving the public.<sup>126</sup> On the other hand, Justice Brandeis, dissenting in a later case, advocated the "prudent investment" theory.<sup>127</sup> Rather than allowing a return on the value of property in service, the "prudent investment" theory allows only a return on the capital honestly and prudently invested by the utility.<sup>128</sup> The theory was intended to preclude utilities from overvaluing their assets in order to obtain an excessive rate base and thus a higher return.<sup>129</sup> Prudent investment is the stricter of the two tests and may in fact arrive at a value below the utilities' book value if the commission determined that a utility manipulated its figures or made an imprudently high investment simply to inflate the rate base. Prudent investment fails to account for inflation which is encompassed by the "fair value" theory allowing the utility to include rising replacement costs in its rate base.<sup>130</sup> This factor is especially important to prevent the erosion of asset value by inflation.

123. Tex. Laws 1975, ch. 721, § 2, at 2327-28.

124. See, e.g., *Railroad Comm'n v. Houston Natural Gas Corp.*, 155 Tex. 502, 510-22, 289 S.W.2d 559, 564-71 (1956); *Utah Power & Light Co. v. Public Serv. Comm'n*, 152 P.2d 542, 546-53 (Utah 1944). See also Priest, *The Public Utility Rate Base*, 51 IOWA L. REV. 283-303 (1966).

125. 169 U.S. 466 (1898).

126. *Id.* at 546-47. Proper valuation of a utility is to be the fair value of property used for the convenience of the public. Factors to consider when computing the fair value are: (1) original cost, (2) probable earning capacity, (3) amount spent on permanent improvements, (4) amount and market valuation of stocks and bonds, (5) present cost of construction, and (6) the sum required to meet operating expenses. Each of these factors should be weighted due to the circumstances of each case. *Id.* at 546-47.

127. *Missouri ex rel. Southwestern Bell Tel. Co. v. Public Serv. Comm'n*, 262 U.S. 276, 289-90 (1923). "The thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise." *Id.* at 290.

128. *Id.* at 289-92. Because the value is limited to capital honestly and prudently invested, it could conceivably be less than the book value—original cost—if the commission found that the utility had made an imprudent investment.

129. *Id.* at 290 (dissenting opinion).

130. See *Smyth v. Ames*, 169 U.S. 466, 547 (1898). The Supreme Court attempted

The major criticism of "fair value" is the difficulty of arriving at a proper figure.<sup>131</sup> In addition, the question of whether the property should be valued at its original or reproduction cost has perplexed "fair value" jurisdictions.<sup>132</sup> In 1956, the Texas Supreme Court resolved both problems of whether to adhere to "prudent investment" or "fair value," and whether to value at original or reproduction cost.<sup>133</sup> The prudent investment theory was summarily dismissed as an improper valuation theory in Texas, not because fault was found in the theory itself, but the court noted that existing statutes required the use of "fair value."<sup>134</sup> The court was careful to point out that its holding was based solely upon legislative delegation, and not on a weakness in the merits of either theory;<sup>135</sup> as a result the legislature could modify its approach at any future time. As to the question of which property value to use—original or replacement cost—the court expressed the opinion that a ratio of the two was proper.<sup>136</sup>

The recently enacted Public Utility Regulatory Act embodies the ratio concept, the only modification being the actual percentages used in the ratio.<sup>137</sup> Under the Act, 60 to 75 percent of the utility's valuation will be based upon the original cost of the property; the remainder will be based upon the property's replacement cost.<sup>138</sup> This figure represents a compromise which actually may prove equitable to both consumers and utilities;<sup>139</sup> for when a value is computed using purely original or reproduction cost it creates an adverse condition for the parties, depending upon an economic

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to resolve the controversy between these two theories in *FPC v. Hope Natural Gas Co.*, 320 U.S. 591 (1944), stating that either valuation method would be adequate if it resulted in a just and reasonable rate. *Id.* at 602. The Court emphasized that the end product would be examined rather than the means by which it was reached. *Id.* at 602. Legal scholars used this opportunity to propose what they felt was the best method. See generally, Ferguson, "Cost" as a Substitute for "Value" in Utility Rate Base Determination: A Comment on Dr. Bauer's Position, 53 YALE L.J. 721 (1944); Hunt & Legg, *Public Utility Rates in Illinois: The Bell Cases*, 50 NW. U.L. REV. 17 (1955); Rose, *The Hope Case and Public Utility Valuation in the States*, 54 COLUM. L. REV. 188 (1954).

131. *Missouri ex rel. Southwestern Bell Tel. Co. v. Public Serv. Comm'n*, 262 U.S. 276, 292 (1923) (dissenting opinion); see *Railroad Comm'n v. Houston Natural Gas Co.*, 155 Tex. 502, 516-20, 289 S.W.2d 559, 568-70 (1956).

132. For an explanation of how "fair value" has changed in its application since *Smyth v. Ames*, see Ferguson, "Cost" as a Substitute for "Value" in Utility Rate Base Determination: A Comment on Dr. Bauer's Position, 53 YALE L.J. 721 (1944); Priest, *The Public Utility Rate Base*, 51 IOWA L. REV. 283, 283-303 (1966).

133. *Railroad Comm'n v. Houston Natural Gas Corp.*, 155 Tex. 502, 289 S.W.2d 559 (1956).

134. *Id.* at 521, 289 S.W.2d at 571.

135. *Id.* at 521, 289 S.W.2d at 571.

136. *Id.* at 523, 289 S.W.2d at 572.

137. Tex. Laws 1975, ch. 721, § 41(a), at 2341-42. See also Alsup, *Should the Texas Legislature Calm the Clamor for a State Utility Commission by Establishing One?*, 16 S. TEX. L.J. 127, 147-48 (1975).

138. Tex. Laws 1975, ch. 721, § 41(a), at 2341-42.

139. THE TEXAS OBSERVER, VOL. LXVII, NO. 12, June 20, 1975, at 10-11.

upswing or downturn.<sup>140</sup> For example, during an inflationary period of rising equipment costs, the use of original cost causes the utility to base its rate of return on an abnormally low figure which will result in lower revenues and will unduly penalize the utility. Conversely, during a recession when prices are falling, original cost valuation would result in an excessively high valuation of utility property. Rates based upon this high value result in excessive revenues to the utility and thus benefit the utility as a windfall while burdening the consumer with artificially high rates.<sup>141</sup> A ratio combining both original and replacement cost is, therefore, very advantageous because it tends to stabilize the unsettling effects that economic cycles have upon rates.<sup>142</sup>

#### *Property Included in the Rate Base*

The proper valuation method is of little use if it is applied to the wrong property; it is thus necessary to determine what property to include in the rate base. On the one hand, utilities will want to include all of their property in order to have the largest possible rate base, while on the other hand, the regulatory commission will endeavor to exclude as much property as possible.<sup>143</sup> The difficulty is that no specific guidelines have been established by the courts.<sup>144</sup> As a general rule, only property "used and useful in the service to the public" may be included in the rate base.<sup>145</sup> This has been adopted by the legislature and embodied in the Public Utility Regulatory Act,<sup>146</sup> but the task of determining the specific exclusions has been delegated to the Public Utility Commission.<sup>147</sup> In the past, courts have allowed depreciation, maintenance expenses, costs of expanding services, and advertising and selling expenses to the extent that the court finds them reasonable.<sup>148</sup> The inclusion of charitable contributions, however, would be

140. *Railroad Comm'n v. Houston Natural Gas Corp.*, 155 Tex. 502, 523, 289 S.W.2d 559, 572 (1956).

141. *Id.* at 523, 289 S.W.2d at 572. Rose, *The Hope Case and Public Utility Valuation in the States*, 54 COLUM. L. REV. 188, 189-90 (1954).

142. *Railroad Comm'n v. Houston Natural Gas Corp.*, 155 Tex. 502, 523, 289 S.W.2d 559, 572 (1956).

143. Mello, *Public Utility Rate Increases: A Practice Manual for Administrative Litigation*, 8 CLEARINGHOUSE REV. 411, 412, 414 (1974).

144. In *City of Baytown v. General Tel. Co.*, 256 S.W.2d 187 (Tex. Civ. App.—Galveston 1953, writ ref'd n.r.e.) the court stated that the utility may expect a reasonable return on the "value of the property then being used to render public service . . ." *Id.* at 193. Capital charges were included, but limited to a rate which would ensure confidence in the utility and allow the utility to raise money to enable it to render proper service. *Id.* at 193-94.

145. *Southwestern Bell Tel. Co. v. City of San Antonio*, 75 F.2d 880, 882 (5th Cir. 1935); see *Denver Union Stockyard Co. v. United States*, 304 U.S. 470, 475-76 (1938).

146. Tex. Laws 1975, ch. 721, § 40(a), at 2341.

147. *Id.* § 41(c)(3), at 2342.

148. *West Ohio Gas Co. v. Comm'n*, 294 U.S. 63, 72 (1935) (advertising); *Transworld Airways v. CAB*, 385 F.2d 648, 657 (D.C. Cir. 1967) (advertising expenses);

open to question since it is arguable as to whether it is necessary to provide service to the public.<sup>149</sup> Any non-recurring expense should definitely be excluded because of the tendency to distort the rate base.<sup>150</sup>

An important consideration when large interrelated corporate entities are involved is the purchase of equipment from an affiliate.<sup>151</sup> When an affiliate is allowed to sell goods to the utility at an inflated price, both will benefit if the utility is permitted to pass along the inflated price as part of its rate base.<sup>152</sup> If the affiliate is unregulated, it will probably have a higher rate of return than the regulated utility, and will thus benefit the utility.<sup>153</sup> California has solved this problem by combining the utility and its affiliates into one group; the affiliate is allowed no higher rate of return than the utility.<sup>154</sup> The Texas Public Utility Regulatory Act attempts to alleviate the problem of affiliate sales somewhat differently by requiring the commission to examine such sales to determine whether or not they are reasonable, and set reasonable compensation.<sup>155</sup> This procedure, coupled with the California approach should eliminate abuse by affiliates because of their relationship with the regulated utility.

The new Act also excludes certain income tax benefits from the rate base.<sup>156</sup> Generally, if the utility is a member of an amalgamation or affiliated group which is permitted to file a consolidated income tax return, the company will be prohibited from including the full amount of its taxes if it files a separate return; such an exclusion occurs only if the consolidated return would result in a lower tax liability.<sup>157</sup> Also, an investment tax credit retained by the company may result in a lowering of a rate base.<sup>158</sup> These

*City of Weslaco v. General Tel. Co.*, 359 S.W.2d 260, 265 (Tex. Civ. App.—San Antonio 1962, writ ref'd n.r.e.) (depreciation); *Bexar County v. City of San Antonio*, 352 S.W.2d 905, 907 (Tex. Civ. App.—San Antonio 1961, writ dism'd) (maintenance and expansion).

149. Mello, *Public Utility Rate Increases: A Practice Manual for Administrative Litigation*, 8 CLEARINGHOUSE REV. 411, 413 (1974).

150. *City of Houston v. Memorial Bend Util. Co.*, 331 S.W.2d 418, 422 (Tex. Civ. App.—Houston 1960, writ ref'd n.r.e.).

151. This situation is impliedly treated in Tex. Laws 1975, ch. 721, § 41(c)(1), at 2342, and in the decision of *City of Los Angeles v. Public Util. Comm'n*, 102 Cal. Rptr. 313, 323 (1972).

152. *City of Los Angeles v. Public Util. Comm'n*, 102 Cal. Rptr. 313, 323 (1972).

153. *Id.* at 323. When the two rates of return are averaged and considered as one, the higher rate of the nonregulated affiliate will raise the utility's return. *Id.* at 323.

154. *Id.* at 323. For a similar approach in the federal courts, see *General Tel. Co. v. United States*, 449 F.2d 846, 855 (5th Cir. 1971).

155. Tex. Laws 1975, ch. 721, § 41(c)(1), at 2342. The Public Utility Commission is given the power to investigate records of the utility's affiliates as well as the power to require the utility to disclose the name of holders of substantial portions of securities. *Id.* §§ 67, 68, at 2348-49.

156. *Id.* § 41(c)(2), at 2342.

157. *Id.* § 41(c)(2), at 2342.

158. *Id.* § 41(c)(2), at 2342.

pertinent sections of the Act require the utility to take advantage of the most efficient business practices and the Act further attempts to neutralize any possible abuse of corporate affiliations. By application of these requirements, the commission should enable the consumer to secure the best possible service while the utility is encouraged to operate in the most efficient manner.

#### *Test Year*

Since rates are intended to reflect normal business needs of a utility, it is important to choose a period of operations for base values which is representative of normal business conditions.<sup>159</sup> This period is referred to as a "test year," although it may include a period of several years.<sup>160</sup> The Public Utility Regulatory Act establishes the test year as the 12-month period immediately preceding the rate inquiry.<sup>161</sup> While this is a simple measure to administer, it has a great potential for improper rate setting. In fact, the Act's definition of test year conflicts with existing case law, where, according to the United States Supreme Court, a proper test period should consist of not one but several years.<sup>162</sup> In *West Ohio Gas Co. v. Public Utilities Commission*,<sup>163</sup> Justice Cardozo stated that "the adoption of a single year as an exclusive test or standard imposed upon the company an arbitrary restriction in contravention of the Fourteenth Amendment and of 'the rudiments of fair play' made necessary thereby."<sup>164</sup> Although more difficult to determine, a period of years averaged and adjusted to show trends is more suitable than an arbitrary period such as the last preceding year.

#### *Rate of Return*

Rates charged by a utility should permit a company to recover its operating expenses and also to receive a reasonable return on its invested capital.<sup>165</sup> The United States Supreme Court in *FPC v. Hope Natural Gas Co.*<sup>166</sup> established general rules as to what constitutes a reasonable return:

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159. Mello, *Public Utility Rate Increases: A Practice Manual for Administrative Litigation*, 8 CLEARINGHOUSE REV. 411, 412 (1974); see *Michigan Wisconsin Pipe Line Co. v. FPC*, 263 F.2d 553, 555 (6th Cir. 1959).

160. *West Ohio Gas Co. v. Public Util. Comm'n*, 294 U.S. 79, 81-82 (1935); Mello, *Public Utility Rate Increases: A Practice Manual for Administrative Litigation*, 8 CLEARINGHOUSE REV. 411, 412 (1974).

161. Tex. Laws 1975, ch. 721, § 3(t), at 2330.

162. *West Ohio Gas Co. v. Public Util. Comm'n*, 294 U.S. 79, 81 (1935); *United Gas Pub. Serv. Co. v. State*, 89 S.W.2d 1094, 1100 (Tex. Civ. App.—Austin 1936, writ ref'd), *aff'd*, 303 U.S. 123 (1938).

163. 294 U.S. 79 (1935).

164. *Id.* at 81.

165. Tex. Laws 1975, ch. 721, § 39, at 2341.

166. 320 U.S. 591 (1944).

one sufficient to service the debts and operating costs with an additional increment to secure confidence in the corporation and attract new investors.<sup>167</sup> Section 39 of the new Act incorporates basically the same standard by comparing the utility's return with similar utilities operating in the area.<sup>168</sup>

Of paramount concern is that the rate be nonconfiscatory; that is, not so low as to constitute a taking of utility property without compensation and therefore a violation of due process.<sup>169</sup> The issue of confiscation is often difficult to determine, because due to changing conditions, what is reasonable, at one time may quickly become confiscatory under an altered economic environment.<sup>170</sup> Another complication is that a distinction must be made between confiscation due to changed conditions and losses due simply to poor business judgment by utility management. A public utility commission may not be compelled to set a rate which provides profits and thereby reward poor management.<sup>171</sup> A reasonable rate for services, therefore, may not always ensure that the utility will have a net profit,<sup>172</sup> for there is no automatic assurance that a utility will be profitable. On the other hand, a commission is not required to set rates at a level which barely covers costs, for a reasonable return may be much higher.<sup>173</sup> This is supported by the fact that the return must be sufficient to attract new capital in order that the utility may continually improve its services.<sup>174</sup>

The recent energy shortage has emphasized another reason for setting rates substantially higher than the confiscatory level. A utility serves the public interest by supplying an adequate source of energy; to maintain this service it must have an incentive to expand its operations. In the case of gas utilities, there must be an incentive for exploration and expansion of

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167. *Id.* at 603.

168. *Id.* at 603.

169. *Public Serv. Comm'n v. Great N. Util. Co.*, 289 U.S. 130, 135 (1933).

170. *Banton v. Belt Line Ry.*, 268 U.S. 413, 422 (1925); *Lincoln Gas & Elec. Light Co. v. City of Lincoln*, 250 U.S. 256, 268 (1919); *Fort Worth Gas Co. v. City of Fort Worth*, 35 F.2d 743, 746 (N.D. Tex. 1929).

171. *See Public Serv. Comm'n v. Great N. Util. Co.*, 289 U.S. 130, 135 (1933).

172. *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944). *But see Joslin & Miller, Public Utility Regulation: A Re-examination*, 43 VA. L. REV. 1027, 1070-71 (1957).

173. *Banton v. Belt Line Ry.*, 268 U.S. 413, 422-23 (1925).

174. *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944). An investor will put his money into a venture only if he can make a profit. Some investments being more risky than others, the investor will demand a higher return to balance the increased risk, therefore, a utility must offer the investor a return which ensures him a profit and also compensates him for the risk involved in the investment. Without this increment added to the return which the utilities' securities produce, no new money other than profits generated by the utilities' operations would be available for expansion and improvements, and because of the high cost of equipment and construction, the utilities internally generated profits alone would be inadequate to finance significant expansion



reserves.<sup>175</sup> Therefore, a reasonable rate must balance the customers' desire for the lowest possible rates against the utility's need to continually improve service to the community through constant expansion and improvement.<sup>176</sup> This balance may shift towards the utility in a time of shortage because of an even greater need for expansion of the utility's capacity.<sup>177</sup>

The financial structure of the utility is another factor in rate setting. A rate of return which is reasonable for a utility funded entirely by equity would be markedly different from one funded solely by debt.<sup>178</sup> The discrepancy originates from differences in the costs of the two sources of capital. Generally, debt financing is cheaper than equity financing; however, it is necessary for the corporation to combine both sources of capital.<sup>179</sup> Optimum financial structure depends upon the individual company and the industry in which it operates.<sup>180</sup> Thus, the proper ratio of debt to equity depends upon many special circumstances, and is a question of fact to be determined from expert testimony.<sup>181</sup> The cost of debt and equity, and the ratio in which they are combined will yield the total cost of capital of the utility.<sup>182</sup> This too will vary greatly from firm to firm and if the value of its components must be established by expert testimony, so should the total cost of capital.

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or improvements. See P. HUNT, C. WILLIAMS, & G. DONALDSON, *BASIC BUSINESS FINANCE* 195-96 (4th ed. 1971).

175. *Placid Oil Co. v. FPC*, 483 F.2d 880, 894-95 n.13 (5th Cir. 1973); *El Paso Natural Gas Co. v. FPC*, 281 F.2d 567, 572 (5th Cir. 1960).

176. *Placid Oil Co. v. FPC*, 483 F.2d 880, 894-95 n.13 (5th Cir. 1973).

177. *Id.* at 895 n.13.

178. Only in theory would a company be funded solely by debt capital.

179. Using debt capital allows the utility to take advantage of the beneficial effects of leverage. After a certain point, however, debt becomes too costly because the fixed repayment schedule forces the company to maintain a steady stream of revenues. If the utility has high debt payments and the economy begins to slump, then it is likely that the company's revenues will not be sufficient to service the debt. The company will become insolvent. See *Railroad Comm'n v. Houston Natural Gas Corp.*, 155 Tex. 502, 524, 289 S.W.2d 559, 573 (1956) (utility's basic sources of capital); P. HUNT, C. WILLIAMS, & G. DONALDSON, *BASIC BUSINESS FINANCE* 345-420 (4th ed. 1971). See generally Rose, "Cost of Capital" in *Public Utility Rate Regulation*, 43 VA. L. REV. 1079 (1957).

180. Utilities are known for the stability of their revenues because the demand for their services remains fairly constant irrespective of general economic conditions. Utilities, therefore, generally have a higher percentage of debt in their capital structures than do manufacturing firms whose revenues are more volatile.

181. *San Antonio Transit Co. v. City of San Antonio*, 323 S.W.2d 272, 275 (Tex. Civ. App.—San Antonio 1959, no writ).

182. The following four steps are used in calculating the weighted (average) cost of capital:

1. Determine the cost of each type of financing—bank loans, bonds, common stock, preferred stock, etc.
2. Figure what percentage each source of financing is to the entire capital structure.
3. Multiply the cost times the percentage.
4. Add the sums to get the weighted cost of capital.

For an example of this calculation, assume that the following pertain to Utility Corp. A-Z:

## RATE STRUCTURE

After determining what amount of revenue a utility is entitled to receive, it is necessary to determine what fraction of this total each customer will pay. The breakdown of charges into various classifications is termed the rate structure.<sup>183</sup> Ideally, the utility would interview each customer to determine his particular needs and ability to pay, but reason and cost dictate that classifications be established with customers in each classification being charged the same rate.<sup>184</sup> As with almost any case where classifications are involved, the problem of discrimination arises.

Utilities are allowed to discriminate against customers only to the extent that the utility may establish classifications.<sup>185</sup> Texas courts have held that not all classification discrimination is illegal, only those which are arbitrary and without a reasonable basis,<sup>186</sup> that is, a difference in material billing factors.<sup>187</sup> Material billing factors are many and varied; they are not always based upon economic differences of cost.<sup>188</sup> Major considerations include the cost, quantity, and character of services received, the time of delivery, and any other substantial differences.<sup>189</sup> If there is a reasonable ground for the classification it should remain,<sup>190</sup> but in no case may a utility charge

TYPE OF FINANCING	COST	DOLLAR AMOUNT	% OF WHOLE	WEIGHT
Bank Loans	8%	\$1,000,000	10%	.008
Bonds	10%	5,000,000	50%	.05
Common Stock	15%	3,000,000	30%	.45
Preferred Stock	12%	1,000,000	10%	.012
		10,000,000	100%	.070

WEIGHTED COST OF CAPITAL = 7%

P. HUNT, C. WILLIAMS, & G. DONALDSON, *BASIC BUSINESS FINANCE* 192-95 (4th ed. 1971).

183. See generally Mello, *Public Utility Rate Increases: A Practice Manual for Administrative Litigation*, 8 CLEARINGHOUSE REV. 411, 416-19 (1974).

184. *Id.* at 417.

185. See *Railroad Comm'n v. Weld & Neville*, 96 Tex. 394, 410, 73 S.W. 529, 534 (1903).

186. *Caldwell v. City of Abilene*, 260 S.W.2d 712, 714 (Tex. Civ. App.—Eastland 1953, writ ref'd); see *Railroad Comm'n v. Weld & Neville*, 96 Tex. 394, 406-407, 73 S.W. 529, 532-33 (1903); *Riverside, Inc. v. Gulf States Util. Co.*, 289 S.W.2d 945, 947 (Tex. Civ. App.—Beaumont 1956, writ ref'd n.r.e.).

187. *Ford v. Rio Grande Valley Gas Co.*, 141 Tex. 525, 527, 174 S.W.2d 479, 480 (1943).

188. *Caldwell v. City of Abilene*, 260 S.W.2d 712, 714 (Tex. Civ. App.—Eastland 1953, writ ref'd).

189. *Gillam v. City of Fort Worth*, 287 S.W.2d 494, 497 (Tex. Civ. App.—Fort Worth 1956, writ ref'd n.r.e.).

190. *Botkin v. City of Abilene*, 262 S.W.2d 732, 734 (Tex. Civ. App.—Eastland 1953, writ ref'd n.r.e.) (use of city residents' tax payments to finance utility bonds which paid for a water plant; non-residents made no tax payments). Some examples of reasonable grounds for a classification are: (1) lower rates to canneries using large quantities of gas, *Ford v. Rio Grande Valley Gas Co.*, 141 Tex. 525, 174 S.W.2d 479 (1943); (2) lower rates to industrial users whose gas could be cut off on very short notice, *Wolf v. United Gas Pub. Serv. Co.*, 77 S.W.2d 1091 (Tex. Civ. App.—San An-

different rates to similarly situated customers who receive comparable services.<sup>191</sup>

Rate discrimination may also be based on widely varying factors, including non-economic public policy considerations.<sup>192</sup> Utilities may base classifications upon any matter which creates a substantial difference between customers.<sup>193</sup> In *Ford v. Rio Grande Valley Gas Co.*,<sup>194</sup> public policy reasons were used to justify the classification of canneries as industrial users while allotting a laundry another classification. The city was attempting to spur the growth of the canning industry in the area by offering lower rates to canneries located in an industrial district and using large volumes of gas. The Texas Supreme Court held this to be a valid classification, reasoning that an attempt to bring in new industry by offering special rates was a valid material billing factor.<sup>195</sup>

Cases involving non-residents served by municipal utilities are numerous and have reached what seem to be conflicting conclusions. Some cases hold that a city may not charge non-residents higher rates,<sup>196</sup> while others hold that classifications may be based upon city limits.<sup>197</sup> In each case where the classification was valid, the court found that some corresponding factor caused the cost of servicing non-residents to be higher.<sup>198</sup> Thus, municipal

tonio 1934, writ *dism'd*); *Cock v. Marshall Gas Co.*, 226 S.W. 464 (Tex. Civ. App.—Texarkana 1920, no writ); (3) lower rates for electricity used for power rather than incidental lighting, *Kousal v. Texas Power & Light Co.*, 142 Tex. 451, 179 S.W.2d 283 (1944); (4) lower rates for hotels than apartments, *Caldwell v. City of Abilene*, 260 S.W.2d 712 (Tex. Civ. App.—Eastland 1953, writ *ref'd*); and (5) higher rates due to the provision of fire protection outside city limits, *Town of Terrell Hills v. City of San Antonio*, 318 S.W.2d 85 (Tex. Civ. App.—San Antonio 1958, writ *ref'd n.r.e.*).

191. *Hatten v. City of Houston*, 373 S.W.2d 525, 537 (Tex. Civ. App.—Houston 1963, writ *ref'd n.r.e.*); *Bexar County v. City of San Antonio*, 352 S.W.2d 905, 909-10 (Tex. Civ. App.—San Antonio 1961, writ *dism'd*); *City of Kermit v. Rush*, 351 S.W.2d 598, 599-600 (Tex. Civ. App.—El Paso 1961, no writ).

192. *See Railroad Comm'n v. Weld & Neville*, 96 Tex. 394, 408-409, 73 S.W.2d 529, 533-34 (1903).

193. *Kousal v. Texas Power & Light Co.*, 142 Tex. 451, 458, 179 S.W.2d 283, 286 (1944) (incidental lighting); *Caldwell v. City of Abilene*, 260 S.W.2d 712, 714-15 (Tex. Civ. App.—Eastland 1953, writ *ref'd*) (apartment); *Wolf v. United Gas Public Serv. Co.*, 77 S.W.2d 1091, 1094 (Tex. Civ. App.—San Antonio 1934, writ *dism'd*) (industrial users).

194. 141 Tex. 525, 174 S.W.2d 479 (1943).

195. *Id.* at 528, 174 S.W.2d at 481.

196. *Wiggins v. City of Texarkana*, 239 S.W.2d 212, 216 (Tex. Civ. App.—Texarkana 1951); *aff'd*, 151 Tex. 100, 246 S.W.2d 622 (1952); *Dallas Power & Light Co. v. Carrington*, 245 S.W. 1046, 1050 (Tex. Civ. App.—Dallas 1922, writ *ref'd w.o.j.*).

197. *Town of Terrell Hills v. City of San Antonio*, 318 S.W.2d 85, 88 (Tex. Civ. App.—San Antonio 1958, writ *ref'd n.r.e.*); *Gillam v. City of Fort Worth*, 287 S.W.2d 494, 497 (Tex. Civ. App.—Fort Worth 1956, writ *ref'd n.r.e.*); *Botkin v. City of Abilene*, 262 S.W.2d 732, 734 (Tex. Civ. App.—Eastland 1953, writ *ref'd n.r.e.*).

198. *Town of Terrell Hills v. City of San Antonio*, 318 S.W.2d 85, 88 (Tex. Civ. App.—San Antonio 1958, writ *ref'd n.r.e.*) (higher cost to provide non-residents with fire protection); *Botkin v. City of Abilene*, 262 S.W.2d 732, 734 (Tex. Civ. App.—East-

boundaries alone cannot be considered material billing factors, but if the utility can show other related expenses which make service to non-residents more expensive, then city limits may be used to establish valid classifications.

One of the primary material billing factors is the time at which the service is delivered,<sup>199</sup> and utilities have used this factor to encourage "off peak" consumption.<sup>200</sup> Since a utility must promptly fill its customers' needs for service, the utility should be prepared to supply peak needs on any day of the year and at any hour; therefore, utilities operate at their full capacity only intermittently.<sup>201</sup> This practice leads to waste of facilities and inefficiency. To partially remedy this problem, utilities may offer lower rates for consumption during the period of late evening until early morning. This encourages industrial consumers to make use of their facilities at night when demand from the residential sector is low. Demand is thereby averaged to a lower level which allows the utility to operate more efficiently.<sup>202</sup>

The Public Utility Regulatory Act makes no specific mention of rate structure other than "every rate . . . shall be just and reasonable . . . [and] shall not be unreasonably preferential, prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to each class of consumers."<sup>203</sup> This provision is in accord with existing case law, and as the commission gains experience, rules may be promulgated which actually codify the law in these cases.<sup>204</sup>

### CONCLUSION

Until the Public Utility Regulatory Act, Texas was the only state without a utility regulatory agency. Much of the confusion and expense of regulating utilities should be eliminated by this Act, but for the most part, it adopts concepts already in use. Valuation of the utilities' property is to be based on a ratio of both original and replacement costs; property included in the rate base should be only that which is used by the utility to provide service. The Act allows utilities to establish classifications of customers when setting

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land 1953, writ ref'd n.r.e.) (residents paid for the utility through their municipal taxes while non-residents paid no city taxes).

199. *Ford v. Rio Grande Valley Gas Co.*, 141 Tex. 525, 527, 174 S.W.2d 479, 480 (1943); *Gillam v. City of Fort Worth*, 287 S.W.2d 494, 497 (Tex. Civ. App.—Fort Worth 1956, writ ref'd n.r.e.); *Caldwell v. City of Abilene*, 260 S.W.2d 712, 714 (Tex. Civ. App.—Eastland 1953, writ ref'd).

200. *See Ford v. Rio Grande Valley Gas Co.*, 141 Tex. 525, 528-30, 174 S.W.2d 479, 480-81 (1943).

201. *Smith v. Public Util. Comm'n*, 199 N.E. 179, 180 (Ohio 1935); C. PHILLIPS, *THE ECONOMICS OF REGULATION* 24-26 (1965).

202. *See Ford v. Rio Grande Valley Gas Co.*, 141 Tex. 525, 528-29, 174 S.W.2d 479, 480-81 (1943).

203. *Tex. Laws 1975*, ch. 721, § 38, at 2341.

204. *Id.* § 37, at 2341.

individual rates, but they must charge all similarly situated customers equal rates.

There is one significant departure from existing rate setting methods. The Public Utility Regulatory Act defines the test year as the 12 months immediately preceding the rate inquiry. This definition contradicts existing law and a similar proposition was declared unconstitutional as being a violation of due process. This clause could subvert the entire scheme of responsive and equitable rate setting because by such an arbitrary choice of the valuation period, abnormal business conditions might completely distort resulting rates.

Considered in its entirety, however, the Act represents an important milestone in the road to effective regulation of utilities and prevention of abuse due to disjointed rate making procedures. The commission has the power to govern utilities for the benefit of the people of Texas. The question remains, however, as to whether the commission will exercise its power to that effect.