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BEFORE THE
EASTERN REGIONAL BUSINESS & ECONOMICS UTILITIES CONFERENCE
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REGULATORS HAVE BEEN INSTRUCTED BY THE SUPREME COURT THAT THE "FIXING OF JUST AND REASONABLE RATES INVOLVES A BALANCING OF THE INVESTOR AND THE CONSUMER INTERESTS."[1] THE HIGH COURT HAS ALSO ESTABLISHED THREE STANDARDS TO GUIDE REGULATORS IN THEIR EFFORTS TO STRIKE THE REQUIRED BALANCE. THE ALLOWED RATE OF RETURN MUST 1) MAINTAIN THE COMPANY'S FINANCIAL INTEGRITY, 2) MAINTAIN THE COMPANY'S ABILITY TO ATTRACT CAPITAL, AND 3) PROVIDE INVESTORS WITH A RETURN CONSISTENT WITH THAT EARNED FROM INVESTMENTS WITH COMPARABLE RISKS.[2]

STATE UTILITY REGULATORS HAVE INTERPRETED THE MANDATES OF <u>HOPE</u> AND <u>BLUEFIELD</u> AS REQUIRING CONSIDERATION OF ECONOMIC EFFICIENCY AND BASIC EQUITY. THE RETURN ALLOWED A REGULATED COMPANY MUST BE COMPARABLE TO INVESTORS' MARKET ESTABLISHED OPPORTUNITY COSTS FOR ALTERNATIVE INVESTMENTS. WHEN SUCH COMPARABILITY EXISTS, THE COMPANY'S FINANCIAL INTEGRITY IS MAINTAINED, THEREBY ASSURING ITS ABILITY TO ATTRACT CAPITAL. HOWEVER, THE SPECIFIC RATE OF RETURN ESTABLISHED SHOULD PRODUCE THE MINIMUM NECESSARY SUPPLY OF EQUITY CAPITAL, THUS ASSURING THAT RATEPAYERS ARE PAYING THE LOWEST AMOUNT POSSIBLE. BY THIS EFFORT WE ACHIEVE THE ULTIMATE BALANCING OBJECTIVE.

THE COST OF CAPITAL IS NOT WHAT THEORISTS, REGULATORS OR COMPANY MANAGEMENTS BELIEVE IT SHOULD BE, OR WHAT THEY WOULD LIKE

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[1] <u>FPC v Hope Natural Gas Co.</u>, 320 U.S. 581 at 603. (1944).

[2] <u>FPC v Hope Natural Gas Co.</u>, 320 U.S. 592; <u>Bluefield Water Works & Improvement Co. v Public Services Commission of West Virginia</u>, 262 U.S. 679 (1923).

IT TO BE, BUT WHAT THE MONEY MARKET SAYS IT IS. SINCE CAPITAL IS RAISED IN THE MONEY MARKET, THE RELEVANT INFORMATION TO STUDY AND ANALYZE IS MONEY-MARKET-RELATED-OR-DERIVED INFORMATION. SINCE THE BELL COMPANIES' STOCKS IS NOT TRADED, PROXY COMPANIES MUST BE USED AS SUBJECTS FOR ANALYSIS TO DETERMINE THE APPROPRIATE COST OF COMMON EQUITY CAPITAL. ALL EXPERTS AGREE ON THIS POINT. THE DISAGREEMENT CENTERS ON WHAT PROXIES ARE ACCEPTABLE TO USE AND WHETHER ANY GIVEN ANALYTICAL TECHNIQUE IS EITHER APPROPRIATE OR ACCURATE.

MANY TECHNIQUES HAVE BEEN PROFERRED BY THE EXPERTS AND DEBATED BY THE PARTIES. THE COMPARABLE EARNINGS AND RISK PREMIUM APPROACHES BEING TWO TECHNIQUES THAT HAVE ENJOYED SOME ATTENTION OVER THE PAST DECADE. BUT I CAN STATE, WITH SOME COMFORT, THAT A MAJORITY OF UTILITY REGULATORS HAVE UTILIZED THE DISCOUNTED CASH FLOW (DCF) METHOD AS THEIR PRIMARY MEASURE IN DETERMINING COST OF CAPITAL UNDER RATE OF RETURN REGULATION. THE DCF METHOD, AS YOU KNOW, IS BASED ON THE PREMISE THAT AN INVESTOR PURCHASES THE RIGHTS TO AN INCOME STREAM WHEN HE BUYS COMMON STOCK. THE DCF METHOD ASSUMES THAT THE PRICE AN INVESTOR PAYS FOR A STOCK REFLECTS THE DISCOUNTED VALUE OF THE FUTURE INCOME ASSOCIATED WITH THE STOCK OWNERSHIP (FUTURE DIVIDENDS, FUTURE EARNINGS OF THE COMPANY AND THE PROCEEDS TO THE SHAREHOLDERS OF THE ULTIMATE SALE OF HIS STOCK). THE TECHNIQUE IS A MATHEMATICAL ANALYSIS WHICH TAKES THE CURRENT MARKET PRICE, PROJECTS AN INCOME STREAM (DIVIDEND YIELD AND RETAINED EARNINGS) AND COMPUTES THE DISCOUNT RATE, WHICH IS BELIEVED TO REFLECT THE RETURN REQUIRED BY AN INVESTOR TO PURCHASE

A PARTICULAR STOCK AT A PARTICULAR TIME. SINCE BELL TELEPHONE COMPANY'S STOCK IS NOT PUBLICLY TRADED, THEIR EQUITY COST MUST BE ESTIMATED BY EXAMINING MARKET DATA RELATING TO SIMILAR COMPANIES. IN THE PAST, AS LONG AS THE REGIONAL HOLDING COMPANIES WERE ONLY MIRROR REFLECTIONS OF THE OPERATING COMPANIES, IT WAS POSSIBLE TO CONSIDER THE STOCK PRICE AND DIVIDEND POLICY OF THE HOLDING COMPANY AS A REASONABLE PROXY FOR THE TELEPHONE OPERATING COMPANY'S STOCK PRICE AND DIVIDENDS. HOWEVER, IN RECENT YEARS, THE NON-REGULATED ACTIVITIES OF THE HOLDING COMPANIES HAVE BEEN GROWING FASTER THAN THE REGULATED ACTIVITIES. FOR EXAMPLE, IN 1984, REGULATED ACTIVITIES REPRESENTED 87.2 PERCENT OF THE REGIONAL HOLDING COMPANIES TOTAL REVENUE. BY 1989, THIS PERCENTAGE HAD DECLINED TO 80.2 PERCENT. FURTHER, THE PERCENTAGE OF INVESTMENT IN THE REGULATED OPERATING COMPANY HAD DECREASED FROM 97.5 TO 89.2 OF THE HOLDING COMPANY INVESTMENT.

THIS RELATIVELY RAPID GROWTH OF THE UNREGULATED ACTIVITIES SEPARATES THE LINK BETWEEN REGIONAL HOLDING COMPANY FINANCIAL AND STOCK MARKET INDICATORS AND THE TELEPHONE OPERATING COMPANIES ACTIVITIES. IN SO DOING, IT IS MUCH MORE DIFFICULT TO ASCERTAIN THE APPROPRIATE RATE OF RETURN FOR THE OPERATING COMPANY. AS AN EXAMPLE OF THIS PROBLEM, THE EXPERTS NOW ADVISE THAT REGULATORS SHOULD NOT APPLY A DCF ANALYSIS TO EITHER THE LECS OR THE RHCS SINCE THE MARKET DATA FOR THE LECS IS UNAVAILABLE AND THE MARKET DATA FOR THE RHC IS DISTORTED BY WHAT THE JANUARY 17, 1990 VALUE LINE COMPANY REPORTS LABELS AS THE "CELLULAR PHENOMENON." A SIGNIFICANT PORTION OF EACH OF THE RHCS' STOCK VALUE IS THE RESULT

OF CELLULAR OPERATIONS. BASED UPON INVESTOR EXPECTATIONS OF HIGH RETURNS IN THE FUTURE, RHC STOCK PRICES HAVE INCREASED DRAMATICALLY DESPITE THE FACT THAT CURRENT CELLULAR EARNINGS APPEAR LOW, THUS REPRESENTING A SMALL PART OF THE RHCS' TOTAL EARNINGS. THE COMBINATION OF A PRICE THAT INCLUDES INVESTORS' OPTIMISTIC GROWTH FORECASTS FOR CELLULAR AND A DIVIDEND GROWTH RATE WHICH EXCLUDES THE LONG-TERM POTENTIAL OF CELLULAR MAKES IT DIFFICULT TO APPLY THE DCF FORMULA TO RHC DATA IN THE DETERMINATION OF THE COST OF CAPITAL. TO APPRECIATE THIS PHENOMENON AND THE DILEMMA IT CREATES FOR REGULATORS, LETS REVIEW THE EXAMPLE OF THE NYNEX CORPORATION. THE CURRENT ESTIMATED MARKET VALUE FOR NYNEX CELLULAR OPERATIONS IS 3.6 BILLION DOLLARS AND HAS A BOOK VALUE OF 250 MILLION DOLLARS. THIS PRODUCES A MARKET TO BOOK RATIO OF 14 TO 1. HOWEVER NYNEX EARNED LESS THAN 50 MILLION DOLLARS FROM ITS CELLULAR OPERATIONS. THE RETURN ON BOOK VALUE IS A COMFORTABLE 20% WHILE THE RETURN ON MARKET VALUE IS 1.4%.

WELL, IF REGULATORS CANNOT USE THE RHCS AS PROXIES FOR THE OPERATING COMPANIES, WHAT OF THE GROUP OF COMPARABLE COMPANIES THAT THE EXPERTS HAVE IDENTIFIED IN POST-DIVESTITURE RATE PROCEEDINGS?

IN PREPARATION FOR TODAY'S DISCUSSION AND IN AN EFFORT TO OBTAIN THE ANSWER TO THAT QUESTION, I SPOKE WITH SEVERAL ECONOMISTS AND FINANCE EXPERTS TO SOLICIT THEIR OPINIONS ON THIS ISSUE. BASED ON THE VARIED RESPONSES IT IS CLEAR THAT THE NEW TELECOMMUNICATIONS ENVIRONMENT IS CAUSING GREAT CONFUSION AND INCREASED CHALLENGES IN DETERMINING AN APPROPRIATE COST OF CAPITAL. IF THERE IS ANYTHING THAT THE EXPERTS WITH WHOM I TALKED AGREED UPON, IT WAS THE

INCREASED DIFFICULTY IN DEVELOPING COMPARABLES AS A RESULT OF THE INCREASED DIVERSIFICATION BY THE RHCS. THERE ARE NO LONGER ANY "PURE" COMPARABLES IN THE TELECOMMUNICATIONS INDUSTRY, IN VIEW OF THE LECS' GENERAL PATTERN OF DIVERSIFICATION. AS PROFESSOR WILLIAM CARLTON OF THE UNIVERSITY OF ARIZONA TOLD ME, "THE DIRECT MARKET METERS ARE NO LONGER AVAILABLE." THIS MEANS THAT THE TRADITIONAL METHODOLOGIES THAT WE AS REGULATORS HAVE USED AS MEASURES OF THE COST OF CAPITAL FOR THE LECS SUCH AS DISCOUNTED CASH FLOW, CAP M AND RISK PREMIUMS, AND HISTORICAL EARNED RETURNS MAY NO LONGER PROVIDE THE BEST MEANS OF ESTIMATING THE COST OF CAPITAL.

AS AN ALTERNATIVE TO THESE TRADITIONAL METHODS, BELL ATLANTIC RECENTLY FILED TESTIMONY IN THE FCC REPRESCRIPTION CC DOCKET 89-624 IN WHICH THE COMPANY ADOPTED A "CLUSTER" ANALYSIS WHICH HAS BEEN DESCRIBED BY USTA AS A "NEW" APPROACH FOR DETERMINING A SET OF COMPARABLE FIRMS. I AM NOT CERTAIN THAT IT IS A "NEW CONCEPT", SINCE IT IS MY UNDERSTANDING THAT IT HAS BEEN USED IN OTHER JURISDICTIONS AS EARLY AS THE LATE 1970'S. AS I UNDERSTAND THE METHODOLOGY, THE CLUSTER APPROACH USES THE SELECTION OF RISK INDICATORS SUCH AS SALES GROWTH, CASH FLOW AND OPERATING INCOME VARIANCES TO ALLEGEDLY CAPTURE THE FUNDAMENTAL RISK CHARACTERISTICS IN AN EFFORT TO SELECT RISK SIMILAR FIRMS. I SPOKE WITH DUKE UNIVERSITY FINANCE PROFESSOR DR. JAMES H. VANDER WEIDE WHO FILED TESTIMONY ON BEHALF OF BELL ATLANTIC ENDORSING THE USE OF THE CLUSTER ANALYSIS FOR DEVELOPING COMPARABLES. IN EXPLAINING THE APPROACH, DR. VANDER WEIDE INDICATED THAT HE CALCULATED THE OPERATING INCOME VARIABILITY (OIV) FOR BELL ATLANTIC AND FOR ITS

INDIVIDUAL TELCO SUBSIDIARIES. ACCORDING TO DR. VANDER WEIDE THE OIV STATISTIC MEASURES THE VARIABILITY OF ANNUAL OPERATING INCOME AROUND A LINEAR REGRESSION TREND LINE OVER A FIVE-YEAR PERIOD FROM 1984 TO 1988. THE OIV FOR THE AVERAGE OF BELL ATLANTIC'S TELCOS WAS 8.59% AS OPPOSED TO THE 4.66% FOR THE ENTIRE BELL ATLANTIC COMPANY. DR. VANDER WEIDE CONCLUDED THAT DUE TO THE EFFECT OF DIVERSIFICATION INTO BUSINESSES WHICH HAVE LOW CORRELATIONS WITH TELCO OPERATION, THE RISK OF INVESTING IN BELL ATLANTIC WAS SIGNIFICANTLY LESS THAN THE RISK OF INVESTING IN ITS TELCOS. THEREFORE, THE COST OF CAPITAL FOR THE BELL ATLANTIC TELCOS IS GREATER THAN THAT OF THE PARENT COMPANY. THE CLUSTER ANALYSIS HAS BEEN USED IN FILINGS BY NEW JERSEY BELL, BELL SOUTH FLORIDA, AND PACIFIC BELL. HOWEVER THE APPROACH HAS NOT BEEN ADOPTED BY ALL THE RHCS. AMERITECH, US WEST AND PACIFIC TELESIS HAVE EXPRESSED STRONG RESERVATIONS REGARDING USE OF THE CLUSTER ANALYSIS. PROMINENT CRITICS OF THE TECHNIQUE, SUCH AS FINANCE PROFESSORS CHARLES LINKE OF THE UNIVERSITY OF ILLINOIS, AND ROBERT MALKO OF THE UTAH STATE UNIVERSITY, WITH WHOM I HAVE SPOKEN, CONTEND THAT THE RISK VARIABLES DO NOT ADEQUATELY TRACK FINANCIAL RISKS AND THAT THE METHOD HAS NOT BEEN EMPIRICALLY TESTED.

ANOTHER CHALLENGE FACING REGULATORS IS HOW TO ASSESS THE RISK, IF ANY, ASSOCIATED WITH INCREASED COMPETITION. THE EXPERTS I SPOKE WITH ALL ASSUMED THAT OPERATING COMPANIES, BECAUSE OF INCREASED COMPETITION, ARE VIEWED BY PROSPECTIVE INVESTORS AS RISKIER AND THEREFORE SOME ADJUSTMENT OR ACCOMMODATION MUST BE MADE IN DETERMINING THE COST OF CAPITAL. THOUGH NONE EMBRACED THE THEORY,

SEVERAL AGREED THAT A HYPOTHETICAL CAPITAL STRUCTURE IS ONE POSSIBLE MECHANISM THAT CAN BE USED TO COMPENSATE THE RATEPAYERS FOR BEARING THE BUSINESS RISK. A HYPOTHETICAL CAPITAL STRUCTURE THAT INCREASES THE AMOUNT OF DEBT RELATIVE TO THE ACTUAL STRUCTURE WILL REDUCE THE COST OF CAPITAL. HOWEVER, THE DETERMINATION OF THE OPTIMAL AMOUNT OF DEBT TO ADD TO THE CAPITAL STRUCTURE REMAINS THE ISSUE. MOREOVER, AS THE PERCENTAGE OF DEBT IN THE CAPITAL STRUCTURE INCREASES, THE COST OF DEBT WILL INCREASE. THEREFORE, IN ANY USE OF A HYPOTHETICAL CAPITAL STRUCTURE, ONE MUST CONSIDER THE OFFSETTING IMPACTS ON THE COST OF CAPITAL DUE TO POTENTIAL INCREASES IN THE COST OF DEBT.

ANOTHER METHOD WHICH PURPORTS TO BETTER REFLECT THE RISK FOR RESIDUAL MONOPOLY CUSTOMERS IS TO START FROM A RISK PREMIUM THAT WAS APPROPRIATE IN THE MONOPOLY ERA OF THE 1960'S AND 1970'S. PRESUMABLY THAT RISK PREMIUM WILL BE LOWER THAN THE CURRENT RISK. DR. MALKO OF UTAH STATE UNIVERSITY IS A STRONG PROPONENT OF THIS METHODOLOGY. HE SUGGESTS DEVELOPING A RISK PREMIUM BY LOOKING AT THE HISTORICAL PERIOD FROM 1960-1980 OR 1970-1980. ACCORDING TO DR. MALKO A RISK PREMIUM CAN BE DEVELOPED FOR THE ENTIRE PERIOD, OVER A FIVE-YEAR AVERAGE, OR FOR EACH YEAR, WORKING FROM U.S. TREASURY BONDS. HE THEN SUGGESTS THAT YOU EXTRACT FROM THE HISTORICAL PERIOD A RISK PREMIUM THAT REFLECTS THE ECONOMIC CONDITIONS THAT YOU ANTICIPATE WILL EXIST DURING THE RATE EFFECTIVE PERIOD.

SOME OF THE PARTIES THAT FILED COMMENTS IN THE FCC REPRESCRIPTION PROCEEDING ARGUED THAT RISKS SHOULD BE ASSESSED BY

USING THE STOCK PRICES OF THE RHCS AS THE BASIS FOR DETERMINING THE COST OF CAPITAL. THE EXISTING STOCK PRICES, THEY ARGUE, ARE THE BEST INDICATORS OF PERCEIVED RISK. OTHERS ARGUE THAT BECAUSE THE EXISTING STOCK PRICES REFLECT THE PREMIUM PLACED ON THE CELLULAR COMPONENT OF THE COMPANIES BUSINESS, STOCK PRICES ARE THE WRONG INDICATORS TO USE FOR DETERMINING CAPITAL COST. THOUGH IT IS TEMPTING TO CONSIDER CURRENT STOCK PRICES I AM NOT SURE THAT I CAN AGREE WITH EITHER ARGUMENT. I BELIEVE THAT THE BETTER REGULATORY APPROACH, LONG TERM, IS TO SEPARATE THE UTILITY FROM THE DIVERSIFIED ACTIVITIES OF THE HOLDING COMPANY TO THE EXTENT POSSIBLE IN DETERMINING THE COST OF CAPITAL. I AM WARY OF LUMPING TOGETHER NON-REGULATED VENTURES AND TELCO ACTIVITIES. IF REGULATORS ACCEPT THE PREMISE THAT DIVERSIFICATION IS BENEFICIAL TO THE UTILITY OR ITS CUSTOMERS, REGULATORS MUST ALSO ACCEPT RESPONSIBILITY FOR ANY NEGATIVE CONSEQUENCES OF DIVERSIFICATION.

CONCLUSION

I WOULD AGREE THAT THE TELECOMMUNICATIONS MARKET PLACE HAS UNDERGONE CHANGE. I WOULD AGREE THAT COMPETITION AND DIVERSIFICATION REQUIRES A CAREFUL LOOK AT THE EXISTING METHODS FOR DETERMINING COST OF CAPITAL. I DON'T AGREE THAT THE LOOK WILL NECESSARILY BE "NEW" BECAUSE "DIVERSIFICATION" WAS THE BUZZ WORD FOR THE GAS INDUSTRY IN THE EARLY DECADE OF THE 1980'S. I DON'T AGREE THAT THE LOOK WILL NECESSARILY BE "NEW" BECAUSE THE STANDARDS OF HOPE AND BLUEFIELD STILL APPLY. I DO AGREE THAT THERE ARE MANY CHALLENGES AHEAD FOR ALL OF US. AS YOU KNOW, BUSINESS WEEK TRACKS THE COMPOSITE RETURN ON EQUITY FOR 1000 FIRMS AND FORTUNE MAGAZINE

TRACKS THE MEDIAN RETURN ON EQUITY FOR THE TOP 500 US INDUSTRIAL FIRMS. FOR THE YEARS 1984 TO 1988, THE BUSINESS WEEK COMPOSITE RETURN ON EQUITY WAS 12.3 PERCENT AND THE FORTUNE 500 MEDIAN RETURN WAS 13.2. OVER THE SAME FIVE YEAR PERIOD, THE REGIONAL HOLDING COMPANIES RETURN ON EQUITY WAS 13.6 PERCENT. THESE STATISTICS SUGGEST TO ME THAT IN THE FACE OF ALL THE COMPLEXITIES AND ISSUES THAT I HAVE DISCUSSED TODAY, REGULATORS MUST BE DILIGENT IN FINDING THE ANSWERS TO THE MANY DIFFICULT QUESTIONS. BECAUSE THE SAME SUPREME COURT CAUTIONED REGULATORS BY STATING: "THE END RESULT OF THE COMMISSIONS' ORDERS MUST BE MEASURED AS MUCH BY THE SUCCESS WITH WHICH THEY PROTECT [THE BROAD PUBLIC INTEREST] AS BY THE EFFECTIVENESS WITH WHICH THEY MAINTAIN...CREDIT AND...ATTRACT CAPITAL."[3]

[3] Permian Basin Area Rate Cases, 390 U.S. 747 at 791 (1968).