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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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In the Matter of	)	
	)	
Price Cap Performance Review	)	CC Docket No. 94-1
for Local Exchange Carriers	)	

COMMENTS OF U S WEST COMMUNICATIONS, INC.

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SUMMARY

In this proceeding, the Federal Communications Commission ("Commission") requests comment on the methods currently used to establish local exchange carrier ("LEC") price caps. Primarily, the Commission seeks comments on the method used to calculate LEC productivity for inclusion in the annual price cap index ("PCI") adjustment formula. This issue has been widely debated since the inception of the LEC Price Cap Plan. Various complex methodologies have been proposed in previous price cap dockets, and in each of those dockets, the Commission has faced a multitude of proposed models and dueling economists. U S WEST Communications, Inc. ("U S WEST"), proposes that the Commission make a bold move away from such unproductive debates and instead adopt a plan which simply caps LEC price cap indexes at their current levels.

U S WEST proposes this "Capped Index Plan" to simplify the process and ease the administrative and procedural burden which will surely result if the Commission's proposed TFP methodology is implemented. Competition from AT&T Corp., MCI Telecommunications Corporation, large cable operators (several in conjunction with Sprint), and competitive access providers exists now or is imminent. This competition already provides sufficient market pressure to ensure customers receive the benefits of future productivity gains through lower prices. As the current baskets and service categories will remain in place, competitors will continue to be protected from cross-subsidization. Commission resources will be conserved through the reduction in complex oversight responsibilities and the concomitant

reduction in new dockets necessary to review productivity methodologies. Market-based regulation will benefit all parties involved.

Should the Commission deem it necessary to have a PCI adjustment factor going forward, U S WEST recommends the total factor productivity ("TFP") approach developed by Christensen Associates and supported by the United States Telephone Association ("USTA"). This approach is the most sound, as it is based on publicly available data and well-supported economic theory. U S WEST also recommends multiple no-sharing X-Factors based on specific geographic characteristics and demand density of the various price cap LECs. The use of geographic and density-based factors for multiple options provides an equitable method for their selection.

Finally, in the event the Commission is unable to fully address the complex and difficult issues in this proceeding and the companion Second Further Notice, U S WEST proposes that the Commission consider using the current "interim" Price Cap Plan for an additional annual filing period while continuing to move ahead to establish an aggressive schedule to resolve pricing flexibility and other important access reform issues in 1996.

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COMMENTS OF U S WEST COMMUNICATIONS, INC.

U S WEST Communications, Inc. ("U S WEST"), through counsel and pursuant to the Federal Communications Commission's ("Commission") Fourth Further Notice of Proposed Rulemaking,[1] hereby files its comments in the above-captioned proceeding.

I. THE INITIAL DEVELOPMENT OF THE LOCAL EXCHANGE CARRIER ("LEC") PRICE CAP PLAN

In 1990, the Commission instituted the LEC Price Cap Plan utilizing a methodology which established four separate "baskets" of LEC access services.[2] The four baskets which currently exist are: 1) common line; 2) traffic sensitive; 3) trunking; and 4) interexchange. The traffic sensitive and trunking baskets were

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[1] In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, Fourth Further Notice of Proposed Rulemaking, FCC 95-406, rel. Sep. 27, 1995 ("4th FNPRM").

[2] In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, Second Report and Order, 5 FCC Rcd. 6786 (1990) ("LEC Price Cap Order"), modified on recon., 6 FCC Rcd. 2637 (1991) ("LEC Price Cap Reconsideration Order"), aff'd sub nom. National Rural Telecom Ass'n v. FCC, 988 F.2d 174 (D.C. Cir. 1993).

further subdivided into "service categories." Upper and lower limits for each of the service categories were established by the Commission at the inception of the Price Cap Plan.

Pricing within the range established by the pricing bands ("inband") is presumed lawful.[3] Tariff changes for inband filings can be made on 14 days' notice with reduced cost support. Pricing which is outside of the established bands ("out-of-band") receives much closer scrutiny by the Commission.[4] Price cap indexes (or "PCI") established pricing limits for each basket; service band indexes ("SBI") established similar price band limits for each service category. Tariff prices for LEC access services were originally set within these pricing bands. For tariff changes, these upper and lower SBIs are compared to the actual SBIs calculated from the new tariff pricing to determine if the filing is inband or out-of-band.

During initial consideration of the Price Cap Plan, the Commission sought input on the methodology and calculations used to compute the basket and service category indexes.[5] The Commission recognized the possibility that, as in the early stages of any complex plan, errors could exist in either plan assumptions or specific productivity calculations.[6] For those reasons, the Commission established safety

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[3] LEC Price Cap Order, 5 FCC Rcd. at 6788 ¶ 12.

[4] Id. at 6812-13 ¶ 217.

[5] See In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, Report and Order and Second Further Notice of Proposed Rulemaking, 4 FCC Rcd. 2873 (1989) ("Second Further Notice"), modified on recon., 6 FCC Rcd. 665 (1991), remanded on other grounds sub nom. AT&T v. FCC, 974 F.2d 1351 (D.C. Cir. 1992), vacated in part, 8 FCC Rcd. 3715 (1993).

[6] LEC Price Cap Order, 5 FCC Rcd. at 6801 ¶ 120.

mechanisms or "backstops" to respond to such potential errors while still achieving the goals of price cap regulation. These backstops took the form of mandatory "sharing" of returns above a certain level and a "low-end adjustment" which raised PCIs if returns were below a certain level.

The Commission also established a methodology to annually adjust the various basket and service category indexes for the impact of inflation and productivity gains in the LEC industry -- the PCI adjustment factor. The current PCI adjustment factor is calculated using a formula which offsets U.S. economy inflation (i.e., the Gross Domestic Product Price Index ("GDP-PI")) by a productivity offset, or "X-Factor," plus exogenous cost adjustments.

Since the inception of price caps five years ago, the selection of an appropriate X-Factor has been contentious, mainly because the X-Factor is based on complex, controversial, and somewhat subjective economic models which attempt to measure the difference between the productivity of LECs and the productivity of other industries as a whole. There is no longer a need to continue this unproductive debate because a much simpler plan is available to the Commission.

II. THE COMMISSION SHOULD ABANDON THE CURRENT COMPLEX AND INEFFICIENT PRICE CAP SCHEME AND INSTEAD SIMPLY CAP LEC PRICE CAP INDEXES AT THEIR CURRENT LEVELS

Instead of continually trying to "tweak" the current plan with its complex formulas and methodologies for calculating productivity differences, the Commission should move instead to establish a plan which vastly simplifies the

process. As demonstrated by the following, sufficient competition exists now or is impending which mitigates the need for further artificial adjustments:

- Competition in the local exchange is imminent from the two largest interexchange carriers ("IXC"), AT&T Corp. ("AT&T") and MCI Telecommunications Corporation.
- Large cable multiple system operators (several in partnership with Sprint Corporation, the third largest IXC) are beginning to provide telecommunications service and plan to expand their offerings to include competitive data communications products.
- Large competitive access providers ("CAP") are already firmly established in many large markets.
- Statutory barriers to competition are rapidly being removed.[7]

It is time for the Commission to make a bold move away from inefficient and complex regulatory schemes to simpler, market-regulated approaches. U S WEST proposes that the Commission adopt a plan which simply caps the LECs' PCIs at their current levels.

Under U S WEST's proposed "Capped Index Plan," no going-forward adjustments to the Price Cap Plan or its components by the Commission would be required. This would eliminate the need for future price cap dockets replete with complex models and "dueling economists." No artificial safeguards, in the form of sharing or low-end adjustments, would be available or required. No further adjustments to the PCIs would be made for inflation, productivity, or exogenous

[7] Attached as Exhibits 1a and 1b are matrices which show CAPs and the status of local exchange competition by state in U S WEST's region.

costs. The Capped Index Plan better emulates a competitive market as the risks and rewards are determined by market conditions and the overall economy.[8]

The Capped Index Plan eliminates the need for continued index adjustments and productivity calculations by the LECs. The Commission's tariff filing oversight burdens would also be reduced significantly. The Commission could move valuable staff resources to other important and emerging issues. Competitors would continue to be protected from cross-subsidization by "capped" price cap basket indexes. And, most importantly, consumers would benefit from continued competitive pressure to move prices down.

Competition is alive and thriving in all price cap LECs' territories. The time is right for the Commission to move away from the current archaic and cumbersome price cap methodology. As noted previously, competitors entering the LECs' markets are not small players, and they do not require nor should be provided an unfair competitive advantage by restraining the LECs through the imposition of overly burdensome price cap provisions and debates. The going-forward use of artificial adjustments in the LEC Price Cap Plan will only further distort the interstate access marketplace. The Commission should move immediately to establish the Capped Index Plan for the price cap LECs.

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[8] In supplemental comments to the LEC Price Cap Order, AT&T proposed a similar "pure" price cap system which it referred to as its "simple" plan. See LEC Price Cap Order, 5 FCC Rcd. at 6796 ¶ 80. The simple plan would have frozen LEC prices over a four-year period with no additional adjustment mechanisms or sharing.

III. IF A PCI ADJUSTMENT FACTOR IS DEEMED ESSENTIAL, THEN THE COMMISSION SHOULD USE A TOTAL FACTOR PRODUCTIVITY- ("TFP") BASED PRODUCTIVITY FACTOR

U S WEST urges the Commission to adopt the Capped Index Plan proposed in the previous section. However, if a PCI adjustment factor is deemed necessary or essential by the Commission, then U S WEST recommends the adoption of one which is based on a TFP approach.[9]

A TFP-based proposal was developed in a study performed by Christensen Associates ("Christensen") and placed in comments filed by the United States Telephone Association ("USTA") in the last round of price cap proceedings.[10] The Commission tentatively concluded in its First Report and Order that the TFP method should be used to calculate the X-Factor.[11] To the extent that a PCI adjustment factor is deemed necessary, U S WEST supports the Commission's tentative conclusions. To calculate LEC TFP going forward, the Commission should

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[9] In its simplest form, TFP is a ratio of total output to total input, where total output includes all services provided by an industry -- in this case the LECs -- and total input includes the capital, labor, and materials necessary to provide those services. LEC outputs include: local service, interstate end user access, interstate switched access, interstate special access, intrastate access, long distance service, and miscellaneous services.

[10] See 4th FNPRM ¶¶ 22-23. See Comments of the United States Telephone Association, filed herein May 9, 1994 at Attachment 6, Productivity of the Local Telephone Operating Companies by Lauritis R. Christensen, Philip E. Schoech and Mark E. Meitzen ("Original Christensen Study").

[11] The X-Factor represents LEC productivity in the PCI adjustment calculation. In the Matter of Price Cap Performance Review for Local Exchange Carriers, First Report and Order, 10 FCC Rcd. 8961, 9026-27 ¶ 145 (1995) ("First Report and Order"), pets. for recon. pending and appeals pending sub nom. Bell Atlantic Telephone Companies, et al. v. FCC, Nos. 95-1217, et al. (D.C. Cir. pet. for rev. filed Apr. 19, 1995). 4th FNPRM ¶ 9.

utilize the new, simplified TFP approach developed by Christensen ("Simplified TFP") and proposed by USTA in the instant proceeding.[12]

The Simplified TFP approach uses data sources which are publicly available and easily verifiable and supports the criteria specified by the Commission for the development of an appropriate X-Factor.[13] Consistent with the Simplified TFP approach, U S WEST proposes that the LEC TFP be calculated on a total company basis using annually updated five-year rolling averages.

The Commission has also tentatively concluded that it is appropriate to include an input price differential in a TFP-based X-Factor.[14] While U S WEST believes that over the long term the input price differential ("IPD") between LECs and the rest of the economy will be zero, the inclusion of a short-term IPD arguably achieves the Commission's goal that gains by LECs in reducing unit costs are passed through to consumers. Therefore, U S WEST supports the Commission's proposed use of a short-term IPD in calculating the X-Factor if a PCI adjustment factor is deemed essential.

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[12] See Attachment 1, Total Factor Productivity Methods for Local Exchange Carrier Price Cap Plans, by Lauritis R. Christensen, Philip E. Schoech and Mark E. Meitzen, dated Dec. 18, 1995 ("Christensen Study").

[13] 4th FNPRM ¶ 16 ("[T]he X-Factor should be economically meaningful . . . ensure that ongoing gains by the LECs in reducing unit costs are passed through to consumers . . . calculation of the productivity offset should be reasonably simple and based on accessible and verifiable data.").

[14] First Report and Order, 10 FCC Rcd. at 9033 ¶ 161.

IV. IF A PCI ADJUSTMENT FACTOR IS DEEMED APPROPRIATE, THEN MULTIPLE OPTIONS BASED ON GEOGRAPHIC DENSITY MUST BE AVAILABLE

U S WEST's proposed Capped Index Plan would eliminate the going-forward need for any artificial correction or safety mechanisms such as productivity factors, sharing and low-end adjustments. However, if the Commission adopts a plan which includes a TFP-based, annually updated productivity measurement for use by all price cap companies, the serving area size, geography, and demographics (including the demand density) of companies must be considered and multiple options for productivity based on such factors allowed. These geographic factors have a large impact on the overall unit costs and, thus, on the productivity of various LEC companies.

U S WEST supports multiple no-sharing X-Factor options based upon economies of density. Economies of density are demonstrated when the addition of minutes or lines to existing facilities reduces their overall average cost, spreading the fixed cost over additional units of output. Economies of density result from the ability to spread additional capital investment and expense over increasing volumes on given routes, thus lowering the cost-per-unit of services. The Commission has recognized that the heterogeneity of the industry drives the costs and behavior of not only the incumbent LECs, but also of competitors which enter specific geographic areas based on measurable density factors.

The Commission should adopt multiple no-sharing X-Factors based on the geographic nature of LECs' serving territories. These factors should not be specifically tailored to individual LECs, but should be industry wide. The Commission should use simple criteria based on publicly available data to establish a threshold below which a LEC would qualify for a no-sharing X-Factor that is lower than the baseline factor calculated using the Simplified TFP method.

V. THE COMMISSION SHOULD CONSIDER USING THE INTERIM PLAN FOR AN ADDITIONAL YEAR

In the event the Commission is unable to fully and appropriately address the complex and difficult issues presented in this proceeding and in the 2nd FNPRM,[15] U S WEST proposes that the Commission consider using the "interim" Price Cap Plan established by the First Report and Order for an additional year.[16] This would enable the Commission to provide LECs and their customers with a modicum of near-term pricing stability while allowing for a smoother and more predictable transition to U S WEST's proposed Capped Index Plan or another newly selected price cap methodology.

Deferring the use of a new methodology would also give the Commission additional time to effectively analyze the Capped Index Plan and other

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[15] In the Matter of Price Cap Performance Review for Local Exchange Carriers, Treatment of Operator Services Under Price Cap Regulation, Revisions to Price Cap Rules for AT&T, CC Docket Nos. 94-1, 93-124, 93-197, Second Further Notice of Proposed Rulemaking in CC Docket No. 94-1, Further Notice of Proposed Rulemaking in CC Docket No. 93-124, and Second Further Notice of Proposed Rulemaking in CC Docket No. 93-197, FCC 95-393, rel. Sep. 20, 1995 ("2nd FNPRM").

[16] First Report and Order, 10 FCC Rcd. at 9054-59 ¶¶ 210-224.

recommended approaches and the associated study data in a fully developed record. This extra time would be beneficial in the determination of the most appropriate plan based upon rapidly changing markets and would aid the industry in the transition to any new plan. The Commission should consider a one-year extension of the interim plan for use in the 1996 Annual Access Tariff Filing. The new plan would then be effective for the 1997 Annual Filing. At the same time, however, the Commission must continue to move ahead to establish an aggressive schedule to resolve pricing flexibility and other important access reform issues in 1996.

VI. RESPONSES TO COMMISSION SPECIFIED X-FACTOR ISSUES

U S WEST recommends that the Commission adopt its proposed Capped Index Plan and eliminate the need for further complex productivity debates. However, should the Commission choose to require future productivity measurements for inclusion in a PCI adjustment, then U S WEST supports the TFP methodology developed by Christensen and proposed by USTA. U S WEST provides the comments below in response to the specific TFP calculation-related issues raised by the Commission.

A. X-Factor Calculation

Issue 1a: *What is the most reasonable method to develop output price indices for TFP calculation purposes? What data sources should be used to develop output price indices?*

If the continued use of a productivity adjustment factor is necessary, U S WEST supports the Christensen methodology to develop output price indexes for use in the LEC TFP calculations.[17] The economic indexing technique utilized by Christensen involves computing price and quantity indexes for services provided by the LECs for each year of the study. The price and quantity indexes would be aggregated into a price index of total output and a quantity index of total output. However, due to the large array of services provided by the LECs, price and quantity information is not readily available in an indexed form. As a result, Christensen developed price cap indexes which utilize publicly available data and widely accepted price index methodologies.

The categories of output defined by Christensen are reasonable and appropriate. The seven simplified categories are: local service, long distance service, interstate end-user access, interstate switched access, interstate special access, intrastate access, and miscellaneous. The Christensen simplified model uses booked revenues as a substitute for billed revenues which were used in the Original Christensen Study, achieving the Commission's goal of using publicly verifiable information.

There is no better way to categorize LEC services for purposes of developing output indexes. Substituting other methods which are not LEC specific does not accurately represent the true price and quantity indexes for a category and is subject to data availability.

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[17] See Attachment 1, Christensen Study at 3-8.

The Christensen method uses revenue to weigh the various services. This method is appropriate as cost weights reduce the measured rate of total productivity growth, since the cost weights give greater weight to output categories that have experienced lower growth. The appropriateness of alternative weighting schemes in developing the output indexes is analyzed and well described in the Original Christensen Study and the Christensen Study attached to this filing.[18]

Issue 1b: *What is the most appropriate measure of the cost of capital for a TFP study?*

As described in the Christensen Study, several methods were analyzed and the cost of capital implicit in the U.S. National Income and Products Accounts was used.[19] This measure treats LEC and economy-wide costs of capital symmetrically and is based on an independently calculated, publicly available data source, the U.S. Bureau of Economic Analysis. The U.S. economy cost-of-capital method includes both equity and debt components.

The use of U.S. economy cost of capital represents a simplified approach from the Original Christensen Study which used Moody's bond yield as the proxy for the development of accepted annual data series on the opportunity cost of equity. The use of U.S. economy cost of capital as an opportunity cost-of-equity substitution should end the debate on this issue. The U.S. economy cost-of-capital alternative does not

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[18] See also USTA Comments, filed concurrently with this filing at 17-18.

[19] See Attachment 1, Christensen Study at 9-12.

change substantially the TFP and provides a readily available, verifiable substitution.

No basis exists for using Commission authorized rate of return prescriptions for cost-of-capital proxies as they do not represent true market costs of capital and inappropriately link the Price Cap Plan to rate of return regulation. Such use also requires that the Commission continue to hold represcription proceedings for the development of such rates when its stated goal is to move away from rate of return regulation toward a more efficient market-dictated form of regulatory oversight. Cost-of-capital calculations should be updated annually using the U.S. economy cost-of-capital measure recommended in the Christensen Study.

Issue 1c: *What are appropriate depreciation rates for a TFP study?*

The most appropriate depreciation rates for use in the TFP study are the ones that reflect the underlying economic costs. Therefore, economic depreciation rates are the most appropriate measure. The Christensen model incorporates depreciation lives currently used by the U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics ("BLS").[20]

Prescribed depreciation rates are not based on economic theory or research on economic depreciation and may differ substantially from true economic depreciation. Such prescribed depreciation rates contain implicit political assumptions that are not

[20] See id. at 12-14.

relevant or appropriate for use in an otherwise purely economic calculation of TFP and should not be considered.

Issue 1d: *What is the most reasonable method to estimate capital stock?*

The Christensen Study describes the most reasonable method to estimate capital stock and is supported by U S WEST.[21]

Issue 1e: *Is the imputation of capital services from capital stock rather than from capital consumption reasonable?*

As described in the Christensen Study, capital stock is the most reasonable basis for measuring the quantity of capital input and is the standard approach in productivity research.[22] Both the Original Christensen Study and the revised Christensen Simplified TFP approach use the quantity of capital stock to measure the quantity of capital input for each asset class.

Issue 1f: *What is the most reasonable method for developing an implicit rental price?*

The Christensen approach supported by U S WEST is developed from the economic theory of capital.[23] This theory is based on a market equilibrium

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[21] See id. at 14-20. See also USTA Comments, filed concurrently with this filing at 23-25.

[22] See Attachment 1, Christensen Study at 20-21.

[23] See id. at 21-23.

relationship between the price a firm is willing to pay to acquire an asset and the services it provides over its lifetime. Christensen bases the rental price equation on a three-year moving average of the cost of capital and capital gains instead of their current values.

Issue 1g: *What is the most reasonable method for developing a labor index for inclusion in a TFP calculation?*

The ideal measure of labor input would be based on hours worked by LEC employees by skill level, with the hours for each employee then weighted by total compensation. The detail required to develop such a labor index is not feasible, and there is no real evidence that it would have any impact on the resulting TFP calculation. The data from such a study would also not be publicly available or verifiable. The simplest approach is to use total employees reported in the publicly available ARMIS reports.

The Christensen approach simplifies the original TFP study by streamlining the labor input and using total employees weighted by total compensation.[24] The sensitivity analysis performed on this variable reflects no change when compared to the Original Christensen Study.

Issue 1h: *What is the most reasonable method for developing a materials index for inclusion in a TFP calculation?*

[24] See id. at 23-25.

Data is not publicly available for the development of a specific LEC materials price index for use in the Simplified TFP calculation. The ARMIS information on material purchases does not lend itself to an itemization of the types of materials purchased by the LECs. As a reasonable proxy, a broad-based price index such as the GDP-PI should be used.

Issue 1i: *What is the most reasonable way to account for changes in LECs' input prices for use in a TFP approach to calculating the X-Factor?*

Studies and analysis performed by Christensen and the National Economic Research Associates, Inc. ("NERA") support that the best estimate of the expected long-term input price differential is zero.[25] There is no statistical basis for using an observed short-run input price differential as a projection of expected future trends.

In an effort to limit the debate on the appropriate productivity method, U S WEST proposes that the most reasonable way to account for changes in LECs' input prices is the method used by Christensen and NERA for the long-term input price study. However, U S WEST proposes the use of a five-year rolling average for inputs which would be consistent with the TFP calculation. This calculation would derive a short-term input price differential.

Issue 1j: *Is there a valid distinction between intrastate and interstate productivity for the purposes of calculating a TFP index and*

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[25] See id. at 26. Also see Attachment 2, Economic Evaluation of Selected Issues From the Fourth Further Notice of Proposed Rulemaking in the LEC Price Cap Performance Review, National Economic Research Associates, Inc. dated Dec. 18, 1995 ("NERA Study") at 6-10.

an input price index and, if so, does a satisfactory method exist to account for such differences?

The measurement of historic LEC industry TFP growth was calculated for all inputs and outputs of the local telephone companies. There is no economically meaningful way to assign portions of common facilities to individual services, and there is no satisfactory method which exists to account for such differences as indicated by the NERA and Christensen analyses of distinguishing intrastate and interstate productivity.[26] Therefore, U S WEST recommends that the Commission not attempt to distinguish interstate productivity changes from overall changes in TFP.

Issue 1k: *Is there a valid distinction between regulated and nonregulated productivity, or the productivity associated with specific services, such as video dialtone, or groups of services, for the purposes of calculating a TFP index and an input price index? If so, does a satisfactory method exist to account for such differences?*

As described in detail in the NERA and Christensen Studies, no distinction between regulated and nonregulated productivity can be calculated with verifiable, public data.[27] If a productivity factor is required, one that is calculated at a total company basis is the recommended economic approach.

Issue 1l: *How do state and federal universal service and other subsidy programs implemented by the LECs affect the*

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[26] See Attachment 1, Christensen Study at 26-27. Also see Attachment 2, NERA Study at 15-20.

[27] See Attachment 1, Christensen Study at 27, and Attachment 2, NERA Study at 21-22.

industry's TFP? Should the TFP be adjusted to account for such effects?

State and federal universal service and other subsidy programs are captured in the outputs created by increased access to the public switched network facilitated by these plans. Likewise, the costs of compliance with regulatory mandates and obligations are included in the input side of the TFP method. The TFP should not be adjusted to account for these effects.

Issue 1m: *Should the productivity of firms other than LECs be included in a TFP-based X-Factor calculation?*

The Price Cap Plan productivity adjustment should be closely linked with the inputs and outputs specific to the firms regulated by the Plan. The productivity of firms other than LECs should not be included in a TFP-based X-Factor calculation.

Issue 1n: *Are there superior alternatives to Christensen's method of calculating TFP?*

The superior alternative to the requirement of a productivity offset is U S WEST's "Capped Index Plan." The other methods presently suggested as means to calculate a productivity factor are not TFP based, and, therefore, the Christensen method is superior to those available for review.

Issue 2a: *Is the Historical Revenue Method superior to a TFP-based approach for developing an X-Factor?*

The proposed Historical Revenue Method is not superior to a TFP-based approach for developing an X-Factor, because the Historical Revenue Method determines an X-Factor which is linked to a certain rate of return earning level. An earnings-based method is incompatible with the core principle of price regulation which introduces efficiency incentives by severing ties to cost plus pricing as practiced in traditional rate of return regulation.[28]

Issue 2b: *Is the Historical Price Method superior to the TFP approach for developing an X-Factor?*

The Historical Price Method is also not superior to a TFP-based approach for developing an X-Factor. While some versions of the Historical Price Method utilize some valid premises which are shared by a TFP approach, the data used to calculate a productivity factor using the Historical Price Method is not publicly available or verifiable.

Issue 2c: *Should the X-Factor in the long-term price cap plan include a consumer productivity dividend?*

The Commission introduced the consumer productivity dividend ("CPD") in the LEC Price Cap Order; the Commission concluded that setting a productivity factor equal to historical productivity levels under rate of return regulation would not necessarily force carriers to share with consumers the efficiencies derived from

[28] See Attachment 2, NERA Study at 29-32. And see USTA Comments, filed concurrently with this filing.

incentive regulation. To ensure sufficient consumer benefits, an upward adjustment of 0.5 percent was applied to the historical productivity rate. Now that the Simplified Christensen TFP calculation uses four years of data on LEC productivity under incentive regulation, the need identified previously by the Commission for including a CPD is eliminated. Consequently, the Commission should eliminate the CPD from the calculation of all X-Factors. Even the presence of an "additional incentive" of a non-sharing X-Factor does not require the continuation inclusion of a CPD. Any additional productivity improvements associated with a non-sharing X-Factor will be reflected in Christensen's Simplified TFP calculations and, hence, in the X-Factor itself, ensuring that these productivity gains are shared with customers.

Issue 3a: *Should we base the X-Factors in the long-term plan on a moving average, or should we establish fixed X-Factors to be reviewed and revised periodically in performance reviews?*

X-Factors in a long-term plan are not an issue if the Capped Index Plan is adopted. If an X-Factor is required, the factor should be based on a moving average, which would eliminate the review of productivity factors in performance reviews. The Commission notes that an X-Factor calculated as a moving average would also be superior to a fixed factor as a moving-average X-Factor could function to reflect both the dynamics of LEC performance and flow through the most recent productivity gains.

Issue 3b: *If we adopt moving average X-Factors, how many years of data should be included in the average?*

Issue 3c: *If we adopt moving average X-Factors, should there be any lag? If so, how long should that lag be?*

U S WEST supports the USTA proposal that five years of data be included in a moving average. U S WEST also supports a two-year lag in the moving average calculation to ensure that the BLS data (relied upon extensively in the Christensen Simplified TFP calculation) is available.

Issue 4: *Should there be multiple X-Factors in the long-term price cap plan and, if so, how many should there be and how should they be determined?*

As noted previously, should the Commission choose not to implement U S WEST's proposed Capped Index Plan and instead selects a plan which is based on an annually adjusted productivity factor, then multiple no-sharing X-Factors are appropriate. While U S WEST does not propose a specific number of X-Factors, it does propose that such multiple X-Factors be based on geographic density.[29] The Commission raised such geographic serving area differences (rural to urban) among the LECs in the 4th FNPRM:

> A single X-Factor, however, would not adequately reflect differences in the economic conditions faced by each LEC and thus could unfairly penalize or reward LECs which face conditions that differ from the industry average. For example, there are variations among the LECs' service regions with respect to level of growth in the overall economy, the proportion of rural and urban areas for which service is provided,

[29] See Section IV supra.