BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of	**)**	
	)	**DOCKET NO. UT-033044**
QWEST CORPORATION	**)**	
	)	
To Initiate a Mass-Market Switching	**)**	
And Dedicated Transport Case	**)**	
Pursuant to the Triennial Review	**)**	
Order	**)**	

RESPONSE TESTIMONY

OF

MICHAEL R. BARANOWSKI

ON BEHALF OF

AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC., AT&T LOCAL SERVICES ON BEHALF OF TCG SEATTLE, AND TCG OREGON
(COLLECTIVELY "AT&T")

BUSINESS CASE

FEBRUARY 2, 2004

TABLE OF CONTENTS

I. INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael R. Baranowski. My business address is 1201 I Street, NW, Suite 400, Washington, D.C. 20005.

Q. ARE YOU THE SAME MICHAEL R. BARANOWSKI WHO PREVIOUSLY FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony introduced the AT&T Business Case Analysis Tool ("BCAT").

II. PURPOSE AND SCOPE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my Response Testimony is to respond to the Direct Testimony of Qwest witness Peter B. Copeland and the business case model called the CLEC Profitability Model ("CPRO") he sponsors.[1] My testimony demonstrates that Qwest's claim that CLECs are not impaired without access to Qwest's unbundled switching in six MSAs in Washington State clearly is erroneous. In particular, I address fundamental problems in the CPRO and show that when these problems are remedied, CLEC profitability turns into significant losses.

[1] See *Direct Testimony of Peter B. Copeland on Behalf of Qwest Corporation*, In the Matter of the Petition of Qwest Corporation to Initiate a Mass-Market Switching and Dedicated Transport Case Pursuant to the Triennial Review Order, Before the Washington Utilities and Transportation Commission, Docket No. UT-033044, December 22, 2003.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The Qwest CLEC Profitability Model (CPRO) seeks to compute the net present value of cash flows of an efficient CLEC over a 25 year period. However, the approach taken does not satisfy the mandate of the FCC because of fundamental flaws in Qwest's analysis. The CPRO makes a number of unreasonable assumptions regarding an efficient CLEC's entry strategy, assumptions that consistently understate costs and overstate revenues. As a consequence, the results reported by Mr. Copeland are biased and should be rejected.

In addition, while I focus on discussing each of these unwarranted assumptions separately, there is an additional issue around the lack of consistency among the assumptions. This lack of consistency further weakens any credibility to be attached to the CPRO model and to Mr. Copeland's discussion of its results. Correcting for the fundamental flaws demonstrates that an efficient CLEC cannot compete profitably in the state of Washington using UNE-L.

Q. PLEASE BE MORE SPECIFIC REGARDING THE ASSUMPTIONS YOU WILL BE DISCUSSING IN YOUR TESTIMONY.

A. The major assumptions I will be discussing are those that are significant drivers of the CPRO, some of which are the following. I will discuss Qwest's unreasonable assumption that all of the efficient CLECs will successfully target the very small number of available high-margin customers, as well as Qwest's unsupportable assertion that increased competition will have no downward effect on prices over

the next ten years. Both of these assumptions by Qwest exaggerate the revenues to be expected by an efficient CLEC. In addition, I will discuss Qwest's use in its CPRO model of a 25-year investment horizon, an assumption which should not be accepted as representative of the planning horizon used by investors contemplating an investment in this industry. Like the other revenue-related adjustments, this assumption overstates the ability of UNE-L to be profitable. I also discuss customer churn and show that Qwest has adopted an unrealistically low churn rate thereby understating costs, including customer acquisition costs. In addition, I discuss market entry assumptions and how Qwest is being inconsistent in its assumptions, resulting in improperly understating costs. I also discuss several other cost issues.

Finally, I restate the CPRO results shown by Qwest, correcting for the errors discussed above. This all leads to the inevitable conclusion that CLECs would be significantly impaired economically without access to unbundled switching and that access to unbundled switching should continue to be mandatory in Washington.

Q. HAVE YOU DEVELOPED TABLES THAT SUMMARIZE THE RESULTS OF YOUR CORRECTIONS TO THE CPRO?

A. Yes. I have prepared two tables summarizing the results of my restatement of the CPRO. The first, Table 1, summarizes the results by MSA so that my results can be compared directly with those produced by Mr. Copeland. The second, Table 2,

summarizes the results by LATA for LATA-674 and the portion of LATA-672 that is within the state of Washington.[2]

Table 1
Summary by MSA of Results of Corrections to Copeland CPRO[3]

MSA	Copeland NPV	Restated NPV	Difference
Seattle	$12,653,834	($34,577,361)	($47,231,196)
Tacoma	2,401,627	(16,896,555)	(19,298,182)
Bremerton	453,812	(5,573,759)	(6,027,571)
Olympia	453,753	(6,226,193)	(6,679,946)
Bellingham	32,448	(2,740,205)	(2,772,653)
Portland	3,526,241	(8,037,873)	(11,564,114)
Non-MSA WCs	N/A	(13,022,420)	(13,022,420)
Total	$19,521,715	($87,074,366)	($106,596,081)

Table 2
Summary by LATA of Results of Corrections to Copeland CPRO

LATA	Copeland NPV	Restated NPV	Difference
672	$3,526,241	($11,030,407)	($14,556,648)
674	15,995,474	(76,043,959)	(92,039,433)
Total	$19,521,715	($87,074,366)	($106,596,081)

As Tables 1 and 2 show, once Mr. Copeland's flawed assumptions are corrected, the CPRO confirms that an efficient CLEC cannot profitably serve the mass market in Washington using UNE-L. In the remainder of my testimony I explain why Qwest's assumptions are invalid and why the corrections I have made to the CPRO are reasonable and appropriate.

[2] Qwest and Mr. Copeland did not produce any CPRO analysis for LATA-676. As such, my restatements of the CPRO also do not include any results for wire centers within LATA-676.
[3] This table includes results for Washington wire centers that fall outside of MSA geographical limits. As explained in more detail later in my testimony, Mr. Copeland's definition of the relevant market improperly excluded these wire centers from his NPV summary.

Q. HOW ARE THE RESULTS OF THE QWEST CPRO MODEL PRESENTED?

A. The CPRO model relies on a discounted cash flow (DCF) analysis of costs and revenues of a hypothetical CLEC entrant providing DS0 level service to the mass market in Washington.

Q. WHAT ARE THE SIGNIFICANT DRIVERS OF THE QWEST CPRO?

A. The primary driver of profits in the Qwest model is a conceptual mismatch between the inputs used to generate costs and the inputs used to generate revenues. Despite the statement in the CPRO Model Inputs portfolio that "[I]nternal consistency in the inputs to any model is essential," it is precisely this internal inconsistency in the CPRO inputs which drive the profits in the model. The CPRO modelers pick and choose inputs as if they are all available on one a la carte menu, completely undermining the business case analysis. The FCC warns against such mismatches in its TRO: "As noted above, the various components of TELRIC rates should be developed using a consistent set of assumptions about competition."[4]

Q. HOW ARE THESE INCONSISTENCIES MANIFEST IN THE CPRO?

The CPRO assumes the efficient CLEC incurs costs like a small CLEC but earns revenues and customers like an incumbent. Thus, low levels of costs are spread

[4] TRO, ¶609.

over a large number of customers, each of which in turn generates high revenues. The CPRO inputs portfolio contains numerous obvious mismatches of this nature.

III. UNREASONABLE ASSUMPTIONS IN THE QWEST CPRO MODEL

Q. BEFORE YOU BEGIN YOUR DISCUSSION OF THE VARIOUS ASSUMPTIONS MADE BY QWEST THAT YOU DISAGREE WITH, PLEASE INDICATE THE DIFFERENCE IN THE CPRO NPV ATTRIBUTABLE TO EACH OF THE ASSUMPTIONS.

A. Listed below are the reductions in the CPRO NPVs resulting from my corrections to the model assumptions.[5]

- Revenues (initial level and future price decreases - $90.5MM
- Churn - $12.6MM
- Time Horizon - $17.0 MM
- Market Entry - $ 5.8 MM
- Transport - $ 3.4 MM
- OSS - $11.6 MM

[5] Because of overlap in certain of the inputs and assumptions within the CPRO, the impact of these individual decreases in NPV do not add up to the total difference set forth in Table 1. For example, the $17.0 million decrease in NPV produced by shortening the time horizon to 10 years is based on eliminating the higher revenues assumed by Qwest. In the combined run reflected in Table 1, the impact of the same change would be lower because overall revenues are assumed to be significantly lower in that run.

Q. WHAT ARE THE UNREASONABLE ASSUMPTIONS YOU ADDRESS WITHIN THE CPRO?

A. In this section I address assumptions relating to revenues, churn, the appropriate time horizon, market entry assumptions, transport and the treatment of OSS costs within the CPRO.

Q. DO THESE REPRESENT ALL OF THE UNRESONABLE ASSUMPTIONS WITHIN THE CPRO?

A. No. These represent only the key drivers for which I have provided alternate inputs in my restatement of the CPRO. There are other issues related to operating expenses and network costs that I address briefly in the next section.

A. REVENUES

Q. WHAT IS THE BASIS FOR THE INITIAL LEVEL OF REVENUES THAT QWEST PREDICTS FOR THE EFFICIENT CLEC?

A. The revenues are based on MCI's "Network Neighborhood" Plan.

Q. DO YOU BELIEVE THESE REVENUE PREDICTIONS ARE REALISTIC IN THIS CASE?

A. No. The assumption that a new entering CLEC would earn revenues per customer equal to MCI's Neighborhood plan is highly unrealistic. MCI is a longtime competitor in the long distance and wireless market with an established brand

name and base of customers for both of these services. The customers it targets with its Network Neighborhood plan (and associated high monthly revenues) represent the cream of the local service customer crop and will as such be a prime target of all competitive entrants – ILECs and CLECs alike. It is unreasonable to assume that the efficient CLEC will be able to attain its projected market share of such customers, particularly in light of the relatively low customer acquisition cost assumed within the CPRO. As explained further in the reply testimony of Drs. William H. Lehr and Lee L. Selwyn, these revenue levels cannot be realistically achieved by the efficient CLEC.

Q. HAVE YOU COMPARED THE INITIAL PER-LINE REVENUE FIGURES IN THE CPRO MODEL AND THOSE YOU ASSUMED IN AT&T'S BCAT MODEL?

A. Yes. The following table shows the per-line revenue figures in year one of CLEC operation for each LATA in Washington State in both the AT&T BCAT model – which reflect a small discount from the actual average rates being charged today – and the Qwest CPRO model:

Table 3
Comparison of Average Monthly Revenue Per Line Between
Qwest's CPRO and the AT&T BCAT

	Average Revenue per Line LATA-674	Average Revenue per Line LATA-672
AT&T BCAT	$33.86	$33.51
Qwest CPRO	$57.64	$57.56

Q. YOU HAVE JUST DISCUSSED THE INITIAL LEVEL OF REVENUES ASSUMED BY QWEST. AS A SEPARATE MATTER, DOES QWEST ASSUME THESE REVENUES WILL DECLINE GOING FORWARD IN THE CPRO MODEL?

A. Qwest assumes revenues will remain at these base year levels for the entire 25-year time horizon.

Q. IS THIS A REASONABLE ASSUMPTION?

A. No. The business case model must take into account the increasingly competitive telecommunications environment. It is well understood not only by economists, but by competitors and consumers alike, that competition tends to lower prices. As competition for mass-market customers increases, one would expect to see significant declines in prices for local telephone service, just as fierce competition in long distance has led to dramatic decreases in per minute long distance rates.

Q. ARE PRICE DECLINES FROM COMPETITION FOR MASS MARKET CUSTOMERS NOW EXPECTED WITHIN THE INDUSTRY?

A. Yes. For example, the effects of such competition for mass market customers is now being reflected in the reports of financial analysts. Credit Suisse First Boston in a February 2003 investor briefing projected that prices for customers served by UNE-P will likely decline an average of 5 percent annually between 2002 and 2008. Such projected declines must be captured in a business case model.

Q. WHAT DECREASE IN FUTURE PRICES DID YOU ASSUME AND WHY?

A. In my restatement of the CPRO results, I assumed revenues would decline an average of 3 percent annually. This figure is conservatively below the 5 percent level forecasted by Credit Suisse First Boston and represents a reasonable estimate of likely revenue trends. It is also generally consistent with the assumption I used in my run of the BCAT, which conservatively assumes a 10 percent reduction in base year prices as well future decreases for features, long distance and other services.

Q. WHAT HAPPENS TO THE CPRO NPV IF YOU SUBSTITUTE REVENUES CONSISTENT WITH THE BCAT FOR THOSE ASSUMED BY QWEST?

A. Changing the revenue inputs to be consistent with those in the AT&T BCAT model and assuming modest future price decreases of 3% on an annual basis reduces the CPRO NPV by $90.5 million.

B. CHURN

Q. WHAT ASSUMPTIONS DOES QWEST MAKE REGARDING CHURN IN THE CPRO MODEL?

A. Qwest uses figures of 3% monthly churn for initial customers (years 1-5 in the CPRO model) and 3% monthly churn in equilibrium (years 6-25 in the CPRO model).

Q. ARE THESE FIGURES CONSISTENT WITH THE OTHER ASSUMPTIONS IN THE CPRO MODEL?

A. No. Because the CPRO model uses revenues from the MCI Neighborhood bundle as a proxy for CLEC revenues, it is reasonable to assume that the churn projections should be consistent with that plan. In fact, the CPRO Model Inputs portfolio states "Because the model begins with current MCI prices, the modelers have chosen values for market share, customer acquisition costs, and churn that are consistent with those prices."[6] However, the churn value of 3% is far from the correct value, as highlighted by a recent Banc of America Securities Report: "Churn is a key driver of the decline in net adds. MCI disclosed in an ex-parte bankruptcy court filing on November 15, 2002 that it is experiencing high levels of monthly churn for its local and long distance bundled "neighborhood" subscribers. On average, MCI loses 25% of its Neighborhood customers within

[6] Exhibit No. PBC-4C of the Testimony of Peter B. Copeland, "CPRO Model Inputs", pp. 5-6.

three months (9.1% monthly churn) and 50% within six months (12.7% monthly churn in months 4, 5 and 6)."[7]

Q. WHAT IS THE APPROPRIATE RATE OF CHURN THAT SHOULD BE REFLECTED IN THE CPRO?

A. A churn rate of 4.6 percent per month, consistent with the churn rate assumed by AT&T for the BCAT, is the appropriate level of churn for the CPRO. This rate is consistent with the churn rate experienced by AT&T in serving the mass market under UNE-P as reported by Banc of America Securities and is more appropriate than the unsupported figure proffered by Qwest.

Q. HAVE YOU RERUN THE CPRO INCORPORATING YOUR PROPOSED CHURN RATE?

A. Yes. Changing the churn values to the more reasonable figures of 4.6 percent reduces the NPV generated by the CPRO by $12.6 million.

C. TIME HORIZON

Q. WHAT TIME HORIZON IS ASSUMED IN THE QWEST CPRO MODEL?

A. The time frame chosen for the DCF analysis in the Qwest model is 25 years.

[7] Banc of America Securities Equity Research Brief, Wireline Telecommunications, "AT&T Corporation: A Case for Consumer Services," April 30, 2003, p. 10.

Q. IS A 25-YEAR TIME HORIZON APPROPRIATE IN THIS CONTEXT?

A. No. As discussed in the testimony of Drs. Lehr and Selwyn, given the rapid pace of changes in technology in the telecommunications industry, a much shorter time horizon is required. Besides the inherent difficulties in predicting costs and revenues over a 25 year horizon even in a mature industry, the enormous potential changes in the status of technology and even the products and services available in the telecommunications industry necessitates a shorter time horizon upon which to consider CLEC business plans.

In addition, it is unlikely that any start-up CLEC would be able to obtain financing based on a profit forecast that extends 25 years into the future, particularly in light of the rash of bankruptcies that plagued the CLEC industry just a few years ago.

Q. WHAT TIME HORIZON DOES AT&T'S MODEL USE AND WHY IS THAT HORIZON APPROPRIATE?

A. The AT&T BCAT uses a more reasonable 10 year time horizon. Because of the uncertainties associated with new business ventures in general and the volatility of the telecommunications industry in particular, it is difficult to forecast financial performance for even ten years. Twenty-five years is virtually impossible to predict. Rapid and unprecedented changes have characterized the telecommunications industry for the past twenty-five years and such changes will undoubtedly continue into the future. As explained by Drs. Lehr and Selwyn, a

twenty-five year time horizon is simply too long a period to develop meaningful results.

Q. DOES QWEST OFFER ANY EXPLANATION FOR THE CHOICE OF A 25-YEAR TIME HORIZON?

A. The only explanation offered by Qwest for the choice of a 25 year time horizon is that "[a]dopting such a long time horizon for the cash flows obviates the need for estimating a terminal value in the model. With discounting, cash flows after twenty-five years have little effect on the results and are ignored."[8] This explanation has no bearing on the economics of CLEC entry, however. The default input of 25 years is not even mentioned in the CPRO Model Inputs documentation.[9]

Q. DOES THE CPRO MODEL MAKE ANY ASSUMPTIONS REGARDING CHANGES IN DEMAND OR PRICES DURING THE 25-YEAR HORIZON OF THE MODEL?

A. The CPRO model assumes no change in demand levels or prices over the entire 25 year time horizon. The only explanation given for this assumption is that "CPRO estimates the value of the company at this time by positing that the

[8] Direct Testimony of Peter B. Copeland, p. 20.
[9] In fact changing this "input" in the actual spreadsheet model has no effect whatsoever. Cell B109 on the 'General Model Inputs' tab of the CPRO model is labeled "Horizon - Number of Years Analyzed (integer not more than twice equipment life)" but changing this value does not change any model results. Indeed this cell has no dependent cells (i.e., it links to no other cells) anywhere else in the model. The CPRO model must be manually manipulated to force it to compute business case results over a shorter time horizon.

company operates for another twenty years but with no further demand growth. This evaluation is conservative because the CLEC, if successful during the five-year period, would experience further growth." It is inconceivable that an assumption of no change in demand or prices over the entire 25-year time horizon could be considered "conservative", and in any case this scenario is completely unrealistic given the realities of telecommunications markets.

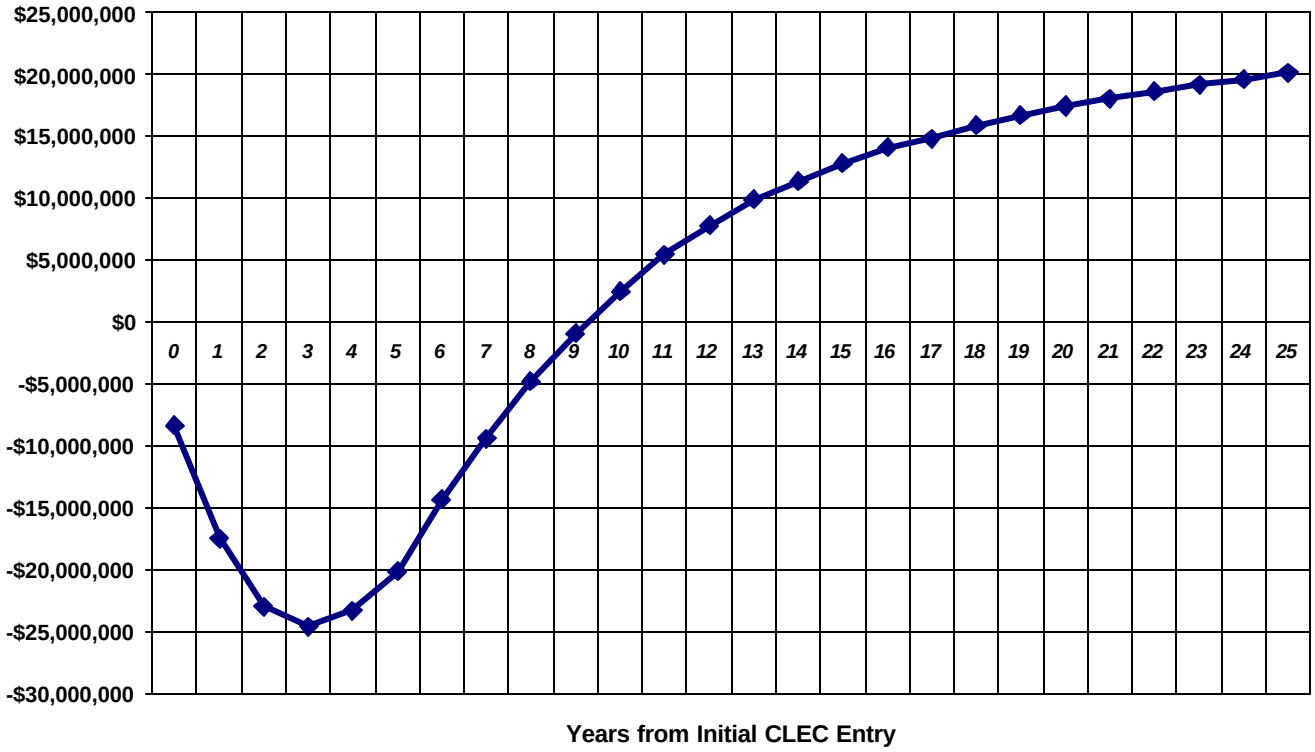
Q. WHY DO YOU THINK QWEST HAS OPTED FOR SUCH A LONG TIME HORIZON?

A. Based on my review of the CPRO, I believe Qwest selected the 25-year time horizon to help ensure that its discounted cash flow would show a positive NPV at the end of the analysis period. Under Qwest's analysis, large capital outlays and increased expenditures attributable to the ramp-up of customer demand occur in the first five years of the analysis. Beyond that time, expenditures remain relatively flat. The 25-year time horizon is needed by Qwest to ensure that adequate revenues are available to offset capital and expense outlays in all six of the MSAs analyzed by Mr. Copeland.

Q. CAN YOU DEMONSTRATE THE BENEFITS THAT QWEST GAINS BY EXTENDING THE CPRO MODEL TIME HORIZON TO 25 YEARS?

A. Yes. Chart 1 below shows that even with the overstated revenues and understated costs embedded in the CPRO, the NPV does not turn positive until year nine of the analysis and is only positive by approximately $2.5 million after the tenth year. With such thin margins, even minor changes in CPRO inputs and

Chart 1 - Cumulative Discounted Cash Flow
CPRO Base Case Scenario



assumptions could yield negative NPVs.

Q. DOES THE TRO DISCUSS THE BURDEN CLECS FACE DUE TO HIGH CAPITAL REQUIREMENTS?

A. Yes. The FCC makes explicit in its TRO the onerous burden on CLECs due to high capital requirements of entry: "Before discussing relevant barriers to entry, however, we note that the telecommunications industry is replete with the kinds of barriers described in the economics discussion above. For example, facilities-based entry into the telecommunications market requires a great deal of capital for equipment, network construction, and operating costs while customers are gradually added to an entrant's network. The capital requirements are exacerbated by the length of time – months or years – that it can take before investments start to turn a profit owing to the pace of construction, the difficulties of luring customers away from incumbent LECs, and the need to invest in a great deal of equipment before serving the first customer. The kinds of equipment needed to provide that service also pose barriers in the form of very high fixed costs, many of which are sunk." [10]

Q. WHAT IS THE IMPACT ON THE NPV OF SHORTENING THE ANALYSIS PERIOD TO A MORE REALISTIC 10 YEARS?

A. Shortening the time horizon to 10 years reduces the CPRO NPV by $17.0 million.

[10] TRO ¶86.

D. MARKET ENTRY

Q. WITH REGARD TO MARKET ENTRY ASSUMPTIONS, WHAT IS THE MARKET DEFINITION PROPOSED IN THE QWEST MODEL?

A. Qwest proposes the metropolitan statistical area or MSA as the relevant market definition.

Q. DO YOU AGREE WITH QWEST'S MARKET DEFINITION?

A. No. As explained in my direct testimony and in the reply testimony of Drs. Lehr and Selwyn, a more appropriate market definition is the entire LATA because of the availability of economies of scale from serving a larger customer base.

Q. DOES QWEST PROPERLY ANALYZE CLEC ENTRY BASED ON ITS DEFINITION OF MSA AS THE APPROPRIATE MARKET?

A. No. While Mr. Copeland's testimony specifically advocates the MSA as the relevant market definition, the CPRO does not in fact analyze entry into individual MSAs. Rather, the CPRO model assumes that the hypothetical CLEC enters all MSAs within each Washington LATA simultaneously, using a single switch to handle all traffic and thereby benefiting from economies of scope and scale not available within its defined market.

Q. WHAT IS THE EFFECT OF QWEST'S INCONSISTENCY REGARDING ITS OWN MARKET DEFINITION?

A. The inconsistency causes the Qwest CPRO model to understate costs because it allows the CLEC to spread large fixed costs, particularly those related to switching, over a broader market and a much larger customer base. If the CPRO is rerun to evaluate entry into individual markets with their limited economies, NPVs are dramatically reduced.

Q. WHAT IS THE IMPACT ON THE NPV OF REDIFININGTHE MARKET TO INCLUDE THE ENTIRE LATA WITHIN THE STATE?

A. Redefining the market to include the LATA reduces the CPRO NPV by $5.8 million.

E. TRANSPORT

Q. HOW IS TRANSPORT FOR THE HYPOTHETICAL CLEC TREATED BY QWEST IN THE CPRO MODEL?

A. Attachment PBC-2 ("General Model Description") to the Mr. Copeland's testimony states "It [the CLEC] obtains a mix of unbundled and special-access transport from the ILEC." In the default version of the model submitted by Qwest, the CLEC pays UNE transport rates exclusively.

Q. IS THIS ASSUMPTION VALID?

A. No for several reasons. First and foremost, this assumption turns the FCC's "efficient CLEC" construct on its head in that it ignores the economies of scope and scale that the FCC has said must be taken into account.[11]

Second, because the purpose of this proceeding is to examine the necessity for certain switching *and* transport UNEs going forward and because Qwest ***in this proceeding*** is asking for relief not only from ULS, but also for relief from certain *transport* routes, it would be exceptionally risky for any CLEC – efficient or otherwise -- to rely on leasing this portion of the network from Qwest for its Enterprise business on an on-going basis in Washington.

Third, the month-to-month leasing of transport UNEs portends other recurring and non-recurring charges such a grooming and re-muxing that have not apparently been acknowledged by Qwest when using the default UNE values in lieu of the special access values contained in CPRO.

Transport cost, therefore, should be based on the cost of an efficient CLEC's backhaul network, i.e., the CLEC's core network is owned with special access employed to connect Qwest's satellite nodes to the CLEC-owned rings. The only other option in CPRO is to use special access rates that are, for all of the reason stated above, preferable to UNEs, but this is certainly not consistent with the FCC's guidance to the Washington Commission.

[11] TRO ¶ 506, "Analysis of Potential Deployment."

Q. HAVE YOU RERUN THE CPRO USING DIFFERENT ASSUMPTIONS RELATED TO TRANSPORT?

A. Yes, I have rerun the CPRO assuming transport is acquired under special access rates. This reduces the NPV by $3.4 million.

F. OSS

Q. DOES THE CPRO ACCOUNT PROPERLY FOR OSS COSTS?

A. No. The CPRO assumes economies of scale related to OSS that are inconsistent with its other modeling assumptions. Specifically, Qwest assumes that OSS costs are shared over 500,000 lines in the CPRO model even though the model assumes the CLEC entrant will serve just over 100,000 lines in the six MSAs. By spreading OSS costs over line counts that are too high, Qwest is understating the OSS cost applicable to serving mass market customers.

Q. HOW DOES QWEST JUSTIFY THIS SEEMINGLY LARGE FIGURE?

A. Citing the CLEC 2003 report, the CPRO Model Inputs (Exhibit PBC-4C) states "It is reasonable to assume that the CLEC serves as many as 500,000 lines. Many CLECs already, or soon will, operate on this scale or larger. According to the *CLEC Report 2003*, four CLECs served over 1,000,000 access lines or equivalents at the end of 2002, with a growth rate of 35 percent over 2001. Fourteen additional CLECs reported 300,000 to 1,000,000 lines and grew at a rate

of 18 percent." However, Qwest provides no link between these reported line counts and entry of an efficient CLEC in Washington.

Q. IS QWEST'S ASSUMPTION THAT A CLEC IN WASHINGTON COULD SERVE 500,000 LINES A REASONABLE ASSUMPTION?

A. No. The figures Qwest cites do not and, indeed, *could not* apply to CLEC entry in Washington State. In the default run submitted by Qwest and referenced in the testimony of Peter Copeland, the CPRO model serves a total of only slightly more than 118,000 lines in Washington MSAs and a large portion of these lines are actually in Oregon. Yet in this same default run Qwest assumes that OSS costs are spread over 500,000 lines, almost 3 times the number of lines Qwest assumes a CLEC would serve in Washington. Qwest's assumption of 500,000 lines looks even more absurd when one considers that there is no CLEC in WA that even comes close to serving 118,000 lines, 8 years after the Telecommunications Act became law.

Q. DID YOU CORRECT OSS COSTS IN THE CPRO?

A. Yes. I restated the CPRO to assume OSS costs will be spread over a more realistic count of 200,000 lines. This figure conservatively allows for economies associated with sharing of certain of the OSS functionality with enterprise customers and results in a reduction in the CPRO NPV of $11.6 million.

IV. OTHER IMPROPER INPUTS TO THE QWEST CPRO MODEL

Q. HAVE YOU IDENTIFIED ANY OTHER UNREALISTIC INPUTS EMPLOYED IN THE QWEST MODEL?

A. Yes. Although Qwest asserts that the efficient CLEC modeled within the CPRO is essentially a new startup, much of the cost data used within the CPRO is derived from large established entities and are thus not reflective of the typically higher costs attributable to start-up firms.

Q. CAN YOU PROVIDE AN EXAMPLE?

A. Yes. Table 1 of the CPRO Model Inputs documentation lists nine small CLECs which are described as "comparable" to the hypothetical CLEC envisioned in the model: Allegiance Telecom, ATX Communications, Choice One Communications, ITC Deltacom, McLeodUSA, Mpower, Pac-West Telecom, Talk America, and Z-Tel Technologies. However, reading the inputs portfolio reveals that the certain of the inputs actually selected for use in the CPRO model are not related to these small CLECs but instead are based on the following sources:

- Other CLECs not included among these nine;
- ARMIS Reports;
- BellSouth, Bell Atlantic, and GTE;
- MCI and AT&T;

- Sprint

Thus, while the CPRO has the appearance of taking on the characteristics of a small CLEC, a closer look reveals that many of the costs are derived from large ILECs and CLECs and as such include economies of scope and scale that are unattainable by the efficient CLEC.

Q. IS THERE A SPECIFIC EXAMPLE OF EFFICIENCIES CAPTURED IN UNIT COSTS THAT WOULD BE UNAVAILABLE TO A START-UP CLEC?

A. Network operating costs are a good example. The CPRO model inputs portfolio states explicitly that "The default values for plant-specific and non-specific costs are based on aggregate statistics for mid-sized ILECs, (i.e., ILECs whose aggregate annual revenues on a consolidated basis are over $100 million and less than $7 billion)" And not small CLECs. These operating costs include items such as hot cut costs, collocation preparation costs, plant-specific expenses for DLC, switching, and multiplexing, and network operating costs per minute. Because even mid-sized ILECs are able to spread fixed costs over a larger base and geographic density of customers, the data source employed for these inputs is inconsistent with the CLEC hypothesized by the CPRO model.

Q. HAVE YOU CORRECTED ANY OF THESE INCONSISTENCIES?

A. Not at this time.

V. RESTATEMENT OF CPRO RESULTS

Q. WOULD YOU PLEASE SUMMARIZE THE CORRECTIONS YOU MADE TO THE CPRO?

A. Yes. I corrected the CPRO results to reflect the following modifications:

- Change revenues to reflect accurately initial levels of revenue per customer that should be expected as well as reflect a realistic decrease in prices annually during the first 10 years
- Change the churn rate to 4.6 percent per month
- Reduce the time horizon to 10 years
- Expand the definition of the market to each LATA within the state
- Change the transport cost from UNE rates to special access rates
- Correct the OSS costs

The results of my restatement are set forth in the following tables.

Table 4
Summary by MSA of Results of Corrections to Copeland CPRO[12]

MSA	Copeland NPV	Restated NPV	Difference
Seattle	$12,653,834	($34,577,361)	($47,231,196)
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Portland	3,526,241	(8,037,873)	(11,564,114)
Non-MSA WCs	N/A	(13,022,420)	(13,022,420)
Total	$19,521,715	($87,074,366)	($106,596,081)

Table 5
Summary by LATA of Results of Corrections to Copeland CPRO

LATA	Copeland NPV	Restated NPV	Difference
672	$3,526,241	($11,030,407)	($14,556,648)
674	15,995,474	(76,043,959)	(92,039,433)
Total	$19,521,715	($87,074,366)	($106,596,081)

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. Qwest's claim that CLECs are not impaired without access to Qwest's unbundled switching in six MSAs in Washington clearly is erroneous. The CPRO makes a number of unreasonable assumptions that consistently overstate revenues and understate costs. As a consequence, the results reported by Mr. Copeland should be rejected. Making the necessary corrections for the fundamental flaws in the

[12] This table includes results for Washington wire centers that fall outside of MSA geographical limits. As explained in more detail later in my testimony, Mr. Copeland's definition of the relevant market improperly excluded these wire centers from his NPV summary.

CPRO model demonstrates that an efficient CLEC cannot compete profitably in the state of Washington using UNE-L.[13]

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

[13] Workpapers that support the calculations in this testimony are contained on the CD labeled Exhibit MRB-3C (Confidential).