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April 24, 2014

Via Electronic Filing
OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX 1088
SALEM OR 97308-1088

RE: Docket No. UM 1481 (Phase 3B) - In the Matter of
PUBLIC UTILITY COMMISSION OF OREGON
Staff investigation of the Oregon Universal Service Fund (Phase III).

Enclosed for electronic filing in the above-captioned docket is the Public Utility Commission Staff's Opening Testimony in UM 1481 Phase 3B.

/s/ Kay Barnes
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c: UM 1481 Service List (parties)

PUBLIC UTILITY COMMISSION
OF OREGON

UM 1481
Phase IIIB

STAFF OPENING TESTIMONY OF
ROGER WHITE

In the Matter of
PUBLIC UTILITY COMMISSION OF OREGON
Staff investigation of the Oregon Universal Service Fund.

April 24, 2014

CASE: UM 1481 PHASE 3B
WITNESS: ROGER WHITE

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 300

Opening Testimony

April 24, 2014

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Roger White. My business address is 3930 Fairview Industrial Dr SE, Salem, Oregon 97302.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. My Witness Qualification Statement is found in Exhibit Staff/101.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address changes that need to be made in the way support is presently being determined. By statute, cost needs to be allocated to all services sharing common facilities. There appear to be situations in which this is not taking place in the case of non-regulated service. I will be proposing a method that can be used to assign a portion of the shared expense to the non-regulated services.

Another purpose of my testimony is to address a possible major inconsistency in the rural and non-rural modeling assumptions that needs to be examined. Although one model is a forward-looking, cost model that constructs the network being modeled based on engineering assumptions and the other is a separation model based on actual company data, there are key assumptions that they should have in common.

Q. DID YOU PREPARE AN EXHIBIT FOR THIS DOCKET?

A. No.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is organized as follows:

INTRODUCTION

Q. WHAT WILL YOU COVER IN THIS SECTION OF YOUR TESTIMONY?

A. This section of my testimony will cover: 1) the objective of UM 1481 IIIB, 2) what I will be discussing in the following sections of my testimony, 3) the definition of basic telephone service, and 4) a brief discussion on the use of broadband networks to provide basic telephone service.

Q. WHAT IS THE OBJECTIVE OF UM 1481 IIIB?

A. The stated objective of UM 1481 IIIB is:

> "Consideration of a methodology for allocation of ILEC network costs between basic telephone service and other services. This will include review of the cost models used to calculate OUSF support and will apply to the support calculation for all companies that receive OUSF support.[1]"

Q. WHAT WILL YOU BE DISCUSSING IN THE REMAINING SECTIONS OF YOUR TESTIMONY?

A. I will be addressing both cost and support modeling in my testimony as well as the need for allocating cost to the services using the common network. I will also be addressing the principles of universal service established at the national level and the guidelines established by Oregon statutes and rules. These principles, statutes, and rules will provide the framework for analyzing models and allocation methods.

Q. HOW WOULD YOU DEFINE BASIC TELEPHONE SERVICE?

A. Basic telephone service is a single-party, voice service provisioned on a network with at minimum voice grade transmission parameters and touch-tone

[1] UM 1481 II, Order No. 13-162, Page 4.

dialing capabilities. A customer with basic telephone service can make Extended Area Service (EAS) calls or any of the other types of calls on the list found in paragraph two. A further discussion of the definition can be found under Oregon Administrative Rule (OAR) 860-032-0190 in my testimony.

Q. IS A VOICE GRADE NETWORK A REQUIREMENT FOR BASIC TELEPHONE SERVICE?

A. No. OAR 860-032-0190 gives the minimum standard a voice service has to meet to be considered basic telephone service. Basic telephone service could also be provided be provided on a network capable of much higher speeds and transmission quality, which I will call broadband networks going forward.

Q. ARE THERE COMPANIES RECEIVING SUPPORT FOR BASIC TELEPHONE SERVICE THAT ARE DELIVERING THE SERVICE ON A BROADBAND NETWORK?

A. Yes. Most of the rural companies are providing their services on various types of broadband networks. The rural companies that I do not know about are the ones owned by CenturyLink and Frontier: CenturyTel, United, and Citizens.

Q. DO YOU SEE A PROBLEM WITH THESE COMPANIES RECEIVING SUPPORT FOR NETWORKS THAT PROVIDE VOICE AND BROADBAND?

A. No. I do not see a problem with a company receiving support for its broadband-capable network; however, the support should be for the portion assigned to voice services to comply with current statutes and rules. The only potential problem that I see is with a company using broadband networks is having the

Universal Service Fund pay for the broadband services along with basic telephone service.

Q. IF THE OUSF IS BEING USED TO SUBSIDIZE THE DEPLOYMENT OF BROADBAND NETWORKS, IS IT A BROADBAND FUND?

A. No. A broadband fund would support the deployment of broadband services, which consists of different types of information riding the network. Such a fund would support service like video and internet services in addition to basic telephone.

Q. IS THE NETWORK PART OF BASIC TELEPHONE SERVICE?

A. No. the network is not part of basic telephone service. The minimum transmission quality and touch-tone capabilities are part of basic telephone service, but the network itself is not a part of basic telephone service. In the case of broadband networks, voice service is just another stream of data being sent over the network.

Q. WILL YOU BE ADVOCATING THE SUPPORT OF BROADBAND SERVICES?

A. No. I will not be advocating the support of broadband services by the OUSF. I believe the intent of the OUSF , based on current statutes and rules, is to support voice service; however, I will be advocating the deployment of networks that minimize the amount of OUSF support that is required, which may be broadband networks.

Q. HOW CAN YOU JUSTIFY USING A BROADBAND-CAPABLE NETWORK TO PROVIDE VOICE SERVICE?

A. In many cases, voice service can be provided more cheaply on a broadband network than it can on a network only capable of voice grade speeds. If the cost of the network can be shared with other services, basic telephone service can potentially be provided more cheaply on a broadband network than it could be on a stand-alone, voice-grade network.

Q. DOES THE CHOICE TO USE A BROADBAND NETWORK REDUCE THE AMOUNT OF OUSF SUPPORT A COMPANY NEEDS?

A. Typically, broadband networks have the capability of providing video and internet services as well as voice service. These additional services allow the companies to earn additional revenues from their network investment that they would not have earned with voice service alone. If a portion of the expense is assigned to video and internet services or if the additional revenue is factored in when calculating the amount of support needed, then it is possible to reduce the amount of OUSF paid out.

Q. IS LOOKING AT TOTAL REVENUES DERIVED FROM THE LOOP INVESTMENT A GOOD WAY TO DETERMINE IF A COMPANY NEEDS SUPPORT?

A. Yes. Looking at the revenues derived from the network clearly is one of the better ways to establish whether or not a company needs support. It does not require allocations or affordability benchmarks. Support in this case is based on what a company needs to achieve a targeted rate of return.

Q. WHAT OTHER WAYS ARE THERE to ESTABLISH WHETHER OR NOT A COMPANY NEEDS SUPPORT?

A. So far we have looked at support being determined based on different types of benchmarks such as a standard price or a standard rate of return. Another way of determining support would be based on allocating a fixed pool of money to the companies in the pool based on normalized financial statistics. This type of pool would be based on the relative need of a company.

Q. DO YOU THINK LOOKING AT ALL OF A COMPANY LOOP RELATED REVENUES TO DETERMINE NEED COULD BE IMPLEMENTED AT THIS TIME?

A. No. At this time there a legal barrier that prevents the Commission from looking at a company's total network derived revenues. In UM 1481 II, the administrative law judge, citing ORS 759.218, found that the revenues derived from non-regulated service, utilizing the common network, could not be considered. This same ruling found it reasonable and required by the same statute that a part of the network cost be assigned to the other services riding the network.

GOAL OF UNIVERSAL SERVICE

Q. WHAT IS THE GOAL OF THE OUSF?

A. The primary goal of the OUSF is to that ensure consumers in all regions of the state, including low-income consumers and those in rural, and high cost areas, should have access to telecommunications that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

ORS 759.425

Q. ARE THERE GUIDELINES FOR CALCULATING OUSF SUPPORT?

A. Yes. The statutory guidelines are found in Oregon Revised Statute ("ORS") 759.425(3). These guidelines were established prior to 2000 and have not changed. At the time the guidelines were established, voice service accounted for almost all of the revenues derived from the switching and loop facilities that were to be supported by the OUSF. Currently, the facilities carrying the voice services are also carrying other revenue producing services.

Q. WHAT DOES ORS 759.425(3) STATE REGARDING THE CALCULATION OF SUPPORT?

A. ORS 759.425(3) describes the process of calculating the support as follows:

> The universal service fund shall provide explicit support to an eligible telecommunications carrier that is equal to the difference between the cost of providing basic telephone service and the benchmark, less any explicit compensation received by the carrier from federal sources specifically targeted to recovery of local loop costs and less any explicit support received by the carrier from a federal universal service program.

Q. IS BASIC TELEPHONE SERVICE DEFINED IN ORS 759.425?

A. No. Basic Telephone Service is not defined in ORS 759.425. The statute gives the Commission the authority to define Basic Telephone Service. That definition is presently found in OAR 860-032-0190. This rule will be discussed later in this section.

Q. ARE THE COSTS REFERRED TO IN ORS 759.425(3) THE SAME AS ACCOUNTING COSTS?

A. No. This cost is not the same as the accounting cost one would find on an income statement. This cost is a proxy for the price or rate of the service. The cost includes not only the type of expenses one would normally expect to find on an income statement, it also includes the return on investment. This return covers both the return to bond holders and to shareholders.

Q. ORS 759.425(3) REQUIRES THE USE OF A BENCHMARK. WHY IS A BENCHMARK USED IN THESE CALCULATIONS?

A. The benchmark divides the set of wire center and company Rates into two groups: the high cost group and all others. Employed this way, the benchmark can be viewed as an affordable rate for basic local exchange service.[2] High cost Rates are those that are above the affordable rate, all others are at or below the affordable rate. Another way of viewing the benchmark is as a device that separates areas into two groups - ones that are candidates for OUSF support and ones that are not candidates for OUSF support.

[2] Docket UM731 Phase IV, Order No. 00-312, p 21, Issue 8, “Discussion and Resolution.”

Q. ONCE THE BENCHMARK HAS ESTABLISHED WHICH AREAS ARE HIGH COST, WHAT IS THE NEXT STEP IN DETERMINING IF THOSE AREAS SHOULD RECEIVE SUPPORT?

A. Before a candidate high cost area can receive support, the support measured by the difference between the cost and the benchmark must be adjusted downward by any federal money specifically targeted to recovery of local loop costs and also by any explicit support the company receives from a federal universal service program. The benchmark is assumed to be the amount that a company can earn from its customers; any revenue requirement above that amount is going to have to be covered by other sources.

Q. WHY DOES ORS 759.425(3) REQUIRE THAT THE SUPPORT AMOUNT BE ADJUSTED FOR ANY EXPLICIT FEDERAL SUPPORT THE COMPANY RECEIVES?

A. The statute recognized the need to include not just revenues that a company received from its customer for basic telephone service, but also revenues from other sources that reduced the amount of funds needed from the OUSF to cover a shortfall.

Q. IF ORS 759.425(3) ONLY ADDRESSES FEDERAL SUPPORT, DOES THIS MEAN THAT NO OTHER REVENUES ARE TO BE CONSIDERED?

A. No. At the time ORS 759.425(3) was created, the only two significant sources of revenue derived from the local loop were customers paying for basic telephone service and federal support. Currently, there are a number of revenue streams made available because of the local loop that should be considered when calculating the amount of support a company receives from the OUSF.

Q. DOES ORS 759.425 PROVIDE US WITH GUIDANCE IN OTHER AREAS?

A. Yes. ORS 759.425 states that the Universal Service Fund should be used "…to ensure basic telephone service is available at a reasonable and affordable rate" and that the objectives of the fund may be modified to conform to Section 254. Section 254 referred to in the statute is Section 254 (b) of the Telecommunications Act of 1996.

OAR 860-032-0190

Q. DOES OAR 860-032-0190 DEFINE BASIC TELEPHONE SERVICE FOR THE OUSF?

A. Yes. OAR 860-032-0190 defines Basic Telephone Service for the OUSF. It is also the general definition that applies wherever the term Basic Telephone Service is used in the PUC's Administrative Rules. This general usage of OAR 860-032-0190 makes it difficult to modify the definition to changes that are taking place in the industry.

Q. HOW DOES OAR 860-032-0190 DEFINE BASIC TELEPHONE SERVICE?

A. Paragraph two of OAR 860-032-0190 defines Basic telephone service as follows:

> "Basic telephone service" means retail telecommunications service that is single party, has voice grade or equivalent transmission parameters and tone-dialing capability, provides local exchange calling, and gives customers access to but does not include:
>
> (a) Extended area service (EAS);

(b) Long distance service;
(c) Relay service for the hearing and speech impaired;
(d) Operator service such as call completion assistance, special billing arrangements, service and trouble assistance, and billing inquiry;
(e) Directory assistance; and
(f) Emergency 9-1-1 service, including E-9-1-1 where available.

47 U.S. CODE § 254

Q. HOW DOES 47 U.S. CODE § 254 IMPACT THE OUSF?

A. ORS 759.425, the statute for universal service, points the Commission to 47 U.S. Code § 254. It states that that the objectives of the OUSF may be modified to conform to Section 254. Section 254 provides the principles on which a universal service fund should be based.

Q. WHAT ARE THE PRINCIPLES FOUND IN SECTION 254?

A. 47 U.S.C.Section 254 (b) of the Telecommunications Act of 1996 sets forth six key principles. Those principles are: 1) quality service at an affordable rate; 2) all geographic regions having access to advanced services; 3) reasonably comparable service available in rural and high cost areas; 4) all providers of telecommunications making an equitable and non-discriminatory contribution to the preservation and advancement of universal service; 5) having the support mechanisms specific, predictable and sufficient; and, 6) ensuring that schools, health care and libraries have access to advanced telecommunications services.

Q. CAN YOU SUMMARIZE THE KEY OBJECTIVES OF SECTION 254(B)

A. The key objectives ensured a network that was reasonably comparable from area to area at rates that are not substantially different. This passage also emphasizes that this network was to be one that was capable of handling not just voice services, but advanced services as well. Specifically, Section 254(b)(3) states:

> Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.[3]

Q. HAVE THERE BEEN ANY ADDITIONS TO THE PRINCIPLES THAT YOU NOTED ABOVE?

A. Yes. A Notice of Proposed Rulemaking (NPRM) on the Connect America Fund (CAF) was released February 9, 2011. This NPRM introduced four new principles that were identified as being rooted in Section 254 of the First Report and Order. These new principles stressed: 1) the need to modernize and refocus the federal USF to make affordable broadband available to all Americans; 2) the need to reduce waste and inefficiency; 3) the requirement to implement measures requiring accountability from companies receiving support, to ensure that public investments are used wisely to deliver the intended results; and 4) the need to transition the fund to market-driven and incentive-based policies that encourage technologies and services that maximize the value of these resources.

[3] Section 254 (b)(3)

RECENT HISTORY OF THE FUND

THE PRESENT USE OF THE FUND

Q. IN THE DISCUSSION THAT FOLLOWS, WILL YOU BE TREATING RURAL AND NON-RURAL COMPANIES SEPARATELY?

A. Yes. Since the method of calculating cost for the rural companies is very different from the method of calculating costs for the non-rural companies I will be treating them separately.

Q. WHICH COMPANIES ARE YOU CLASSIFYING AS NON-RURAL?

A. When I refer to a non-rural company, I am referring to the business units of CenturyLink and Frontier that used to be GTE and US West. The GTE operation first merged with Bell Atlantic to become Verizon. Later Verizon was purchased by Frontier and renamed Frontier Northwest. Something similar happened with US West. The US West merged with Qwest and became Qwest. Later Qwest was purchased by CenturyLink and is now called CenturyLink QC. For purposes of simplicity, I will refer to US West as Legacy Qwest and GTE as Legacy Verizon.

Q. DO CENTURYLINK AND FRONTIER HAVE RURAL BUSIENSS UNITS?

A. Yes. Both companies have rural business units besides their non-rural ones. CenturyLink owns CenturyTel and United and Frontier owns Citizens. Both Frontier and CenturyLink have other business units that I will be classifying as rural companies.

Q. WHY ARE YOU CLASSIFYING SOME OF CENTURYLINK'S AND FRONTIER'S PROPERTIES AS RURAL?

A. CenturyTel, United and Citizens were have always been classified as rural companies in Oregon. Even though they are business units of CenturyLink and Frontier I am keeping their rural labeling because of how their OUSF support is currently calculated for them.

Q. HOW MANY COMPANIES ARE CLASSIFIED AS RURAL AND HOW MANY ARE CLASSIFIED AS NON-RURAL?

A. For the purposes of this testimony, there are presently two companies that are classified as non-rural companies and thirty that are classified as rural.

Q. HOW ARE THE NON-RURAL COMPANIES PRESENTLY USING THE DISBURSEMENTS THAT THEY RECEIVE FROM THE FUND?

A. The non-rural companies are using the funds consistent with Order No. 00-312. That order directed Legacy Verizon and Legacy Qwest to file revenue neutral tariff filings. This means that for each dollar of support that the companies received from the OUSF they were required to reduce revenues by a dollar.

Q. WHAT IS THE SIGNIFICANCE OF REVENUE NEUTRALITY?

A. The significance of revenue neutrality is that neither Legacy Verizon nor Legacy Qwest received any additional money from the OUSF. Both companies had to give up revenues on a dollar for dollar basis in order to receive OUSF support. The companies were not given new money to improve their networks nor to offset above average expenses in the high cost areas.

Q. IF THE COMPANIES ARE NO LONGER REQUIRED TO KEEP THE RATES FROZEN, SHOULD THEY DIRECT THE MONEY THAT THEY ARE RECEIVING TO ANOTHER USE?

A. Yes. The two companies should be directed to use the money for another use.

Q. HOW SHOULD THEY BE DIRECTED TO USE THE MONEY?

A. Section 254 states that the money should be used in the high cost areas to defer maintenance cost and for plant investment. This is the appropriate use of the money going forward.

Q. HAS THERE BEEN A CHANGE IN HOW THE NON-RURAL COMPANIES RECEIVE SUPPORT FROM THE OUSF?

A. Yes. Under the UM 1481 II stipulation approved by Order No. 11-161, presently in effect, the support is reduced, but is no longer on a per line basis. The support is a fixed amount per year beginning this year with step downs in 2015 and 2016.

Q. IN 2003, HOW WERE THE RURAL COMPANIES DIRECTED TO USE THE MONEY THAT THEY RECEIVED FROM THE FUND?

A. Order No. 03-082[4] directed the companies to use their OUSF distributions to reduce the intrastate access Carrier Common Line Charge (CCLC)[5] revenue requirement and if there was any money left after they did that, they were to reduce the prices of other services or return the excess money.

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[4] Docket UM 1017, Order No. 03-082, Pp. 28-29.
[5] A portion of the local loop revenue requirement has been allocated to intrastate access charges and is the CCLC elements of the intrastate rates.

Q. HOW ARE THE RURAL COMPANIES USING THE DISBURSEMENTS THAT THEY RECEIVE FROM THE FUND?

A. The funds are being used to reduce the intrastate carrier common line charge and some other elements of the intrastate access charges. The funds are also being used to reduce billing and collection and special access rates to a lesser degree. These reductions are done on a revenue neutral basis.

Q. HAVE THERE BEEN ANY MORE RECENT RULINGS ON HOW THE RURAL COMPANIES SHOULD USE THE SUPPORT?

A. Yes, there was a ruling on how the rural companies should use the money that they receive from the OUSF. Order No. 11-472 found it appropriate for the companies to use the money from the OUSF to reduce the portion of the loop assigned to intrastate access rates: the Carrier Common Line Charge (CCLC) element of the intrastate access rates. The order also found that it was inappropriate to use the OUSF money to reduce the remaining intrastate access charge elements, which the order classified as wholesale service rates.[6]

Q. HAVE THERE BEEN ANY OTHER CHANGES IN HOW THE RURAL COMPANIES CAN USE THE FUNDS?

A. Yes. In Docket UM 1017, Order No. 12-204[7] changed how the rural companies could use to the funds. Under this order the companies can use the money from the fund to cover any gap between their local service revenue requirement and the revenues that they receive from their customers and from

[6] Docket UM1017 (iii), Order No. 11-472, p. 10
[7] Docket UM 1017, Order No. 02-206, Attachment 1, p.4.

the FCC. One of the primary uses of the funds is still the reduction of the CCLC revenue requirement.

Q. IS IT POSSIBLE THAT A COMPANY COULD HAVE TO HAVE TO RETURN THE SUPPORT THAT IT RECEIVES?

A. Yes. Order No. 12-204 did not override the provision in the stipulation approved by Order No. 03-082 that required a company to return to the fund any excess support that it receives. If a company does not have an appropriate use for the funds specified by the orders, the company could be required to refund the excess amounts that it received. The UM 1481 II stipulation approved by Order No. 13-162 did not overturn this requirement.

Q. HAVE THERE BEEN ANY OCCASIONS WHERE COMPANIES HAVE REFUNDED MONEY TO THE FUND?

A. There have been occasions where companies have taken less than the calculated support amount. This happened in the most recent triennial review. There are not been occasion where a company elected to take a certain level of support and later was required to return a portion of it.

Q. DID THE UM 1481 II STIPULATION APPROVED BY ORDER NO. 13-162 ALTER THE STIPULATIONS APPROVED BY ORDER NO. 03-082 OR ORDER NO. 12-204?

A. The stipulation extended Order No. 12-204 out to 2016 and reduced the aggregate amount support by $1.0 million. None of the other conditions in the two stipulations approved by Order No. 03-082 or Order No. 12-204 were altered. The stipulation approved by Order No. 12-204 was originally going to be review annually.

Q. HAS THERE BEEN A CHANGE IN HOW THE RURAL COMPANIES RECEIVE SUPPORT FROM THE OUSF?

A. Yes. For the duration of the UM 1017 stipulation approved by Order No. 12-204 -rural company support is a fixed annual amount and no longer on a per line basis. The support for the rural companies is presently $15.6 million, but it will step down by $1.0 million in 2015.

<u>NON-RURAL SPENDING IN THE HIGH COST AREAS</u>

Q. HAVE YOU BEEN MONITORING THE NON-RURAL COMPANIES' EXPENDITURES IN THE HIGH COST AREAS?

A. Yes. Order No. 11-192 directed the two companies to file annual reports showing their expenditures in the high cost areas. These reports contain actual investment by wire center and an allocation of each company's total expense.

Q. WHAT HAVE YOU BEEN ABLE TO OBSERVE FROM THESE REPORTS?

A. The reports in combination with responses to my data requests in UM 1481 IIIa indicate that each company's support exceeds its expenditures in the high cost areas.

Q. DO YOU FIND THIS UNEXPECTED?

A. No. It is not unexpected. The payments to the non-rural companies were made on a revenue neutral basis, so they have not been receiving supplemental money to offset investment and expenses in those areas.

Q. CAN YOU CONCLUDE FROM THE ANNUAL REPORT FILED BY THE COMPANIES THAT THE HIGH COST AREAS ARE BEING TREATED DIFFERENTLY THAN OTHER AREAS?

A. No. I have reviewed both companies' plant and reserved balances and have found what appears to be general decline of investment in both Legacy Qwest's and Legacy Verizon's plant. In each case, I am finding the plant to be almost fully depreciated and in some cases fully depreciated.

Q. SHOULD THE COMPANIES USE THE MONEY THAT THEY RECEIVE FROM THE OUSF FOR INVESTMENTS AND EXPENSES IN THE HIGH COST AREAS?

A. Section 254 states that the universal service disbursements should be used for investment and maintenance and repairs in the high cost areas; however, the non-rural companies were never provided any new funds from the OUSF. The money that they received was on a revenue neutral basis. The companies were directed to reduce revenues, not invest in the high cost areas.

Q. SHOULD THE COMPANIES BE REQUIRED TO INVEST IN THEIR HIGH COST AREAS?

A. Yes. Once the companies are no longer required to keep their prices frozen, both companies should be required to invest in the high cost areas and use the money to offset the cost of investment, and maintenance, and repairs in the high cost areas. Going forward, the reporting system that is being put in place will allow staff to track the expenditures.

Q. AFTER THE PRICES ARE UNFROZEN, SHOULD THE NON-RURAL COMPANIES BE REQUIRED TO FUND AT LEAST A PART OF THE INVESTMENT IN THE HIGH COST AREA?

A. Yes. In order to receive money from the fund, the non-rural companies should match, at least in part, the amount of money that they are receiving from the OUSF.

OVERVIEW OF THE SUPPORT PROCESS

Q. CAN YOU EXPLAIN THE CURRENT METHOD OF DETERMING THE AMOUNT OF SUPPORT A COMPANY CAN RECEIVE?

A. Yes. The amount of support a company can receive is determined by subtracting a benchmark amount from the revenue requirement per loop. The revenue requirement per loop consisted of accounting expenses and a return on the rate base all expressed on a per loop basis. The benchmark, which was the average model-based loop cost for the two largest companies, was labeled the affordable rate for basic telephone service. The method of calculating support also took into account the additional revenues that the companies received from federal support programs for their local loops. In summary, a company's OUSF support per loop was calculated by subtracting the benchmark and federal support amounts from a company's revenue requirement per loop. This procedure for calculating support was established by statute ORS 759.425.

Q. DOES A COMPANY'S RATES FOR SINGLE LINE BUSINESS AND RESIDENTIAL SERVICE HAVE AN IMPACT ON ITS SUPPORT?

A. No. A company's rates for single-line residential and business services do not have an impact on its support per line. It makes no difference whether a company's rates are above or below the benchmark.

CURRENT COST MODELING FOR THE NON-RURAL COMPANIES

Q. PLEASE DESCRIBE HOW THE WIRE CENTER SPECIFIC COST IS DETERMINED FOR THE NON-RURAL COMPANIES?

A. The current wire center specific costs used today are based on the 1999 FCC Cost Proxy model runs using Oregon specific adjustments. No changes have been made to those wire center specific costs since then. The 1999 FCC Cost Proxy model was a forward-looking cost model that assumed a higher cost digital network would replace the current analog network.

Q. IS THERE A REASON THE WIRE CENTER SPECIFIC COSTS HAVE NOT BEEN UPDATED?

A. Yes. The order adopting the methodology and costs did not require periodic runs of the model to update the cost. This was not an oversight on the part of the order. The FCC models was based on a number of data sets that for all practical purposes could not be updated because the exact structure of the sets were unknown and the owner at the time was not willing to share that information.

Q. WHAT IS THE NATURE OF THE COSTS PRODUCED BY THE MODEL?

A. The costs produced by the model are forward-looking economic costs. In addition to the accounting type expenses that one would see on an income statement there is also included a return component. When added together and expressed on a per loop basis, this is the rate a company needs to charge to cover its expenses and earn a return on its rate base.

Q. WHAT RATE OF RETURN WAS BUILT INTO THE MODEL?

A. The model used an 11.25 percent rate of return. The 11.25 percent was the standard set by the FCC and was based on an assumed weight average cost of a combination of debt and equity financing. Recently, the FCC has proposed that the rate of return should not be higher than percent.[8]

Q. DO YOU HAVE ANY CONCERNS USING THE SUPPORT AMOUNTS GENERATED BY THE MODELS?

A. Yes. The support amounts produced by the model are almost fourteen years old. Over that time there have been a number of changes that clearly impact the cost of providing service such as the cost of materials, labor, and line losses.

Q. DO YOU SEE CHANGES IN THE COST OF MATERIALS AND LABOR AND THE EROSION OF THE CUSTOMER BASE DRIVING UP THE LEVEL OF SUPPORT?

A. Not necessarily. These items are driving up the average cost of service; however, support is determined by subtracting a benchmark from the wire center specific cost. Since the benchmark is the modeled average cost of service, it will have increased at approximately the same rate as the cost for the high cost wire centers. If both the benchmark and wire center specific cost raise at the same rate, the support amounts will stay approximately constant.[9]

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[8] FCC DA 13-1111, This FCC staff work paper placed the ROR in the 8.06 percent -to-8.72 percent range.

[9] Based on information that staff received in response to its price plan data requests, the largest percent erosion of the customer base appears to be taking place in the highest density areas. The

Q. ARE THERE DRAWBACKS TO THE FCC MODEL?

A. Yes. The big weakness of the FCC model is that there is no link between what the legacy companies are doing and the results of the model. A good model can accurately estimate the cost of providing service, if it is using the company's engineering rules, the technology used by the company, the company's labor and material costs, and a rate base that reflects a normal percentage of gross plant being depreciated. The separations model starts with a company's actual investment and expenses so there is no disconnect between what a company is doing and what is being modeled; whereas, the FCC model does not.

Q. CAN YOU EXPLAIN WHAT YOU MEAN BY A NORMAL PERCENTAGE OF GROSS PLANT BEING DEPRECIATED?

A. Yes. Based on my experience, I would expect to see the accumulated depreciation[10] somewhere between thirty percent of gross plant and seventy percent of gross plant. This represents a fairly normal picture of the offset that

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low density, high cost areas have seen much less erosion of the customer base. Although absolute cost has increased more in the high cost areas, the customer base over which it is spread has not dropped percentagewise as much.

Let the cost of two loops be $15 in a high density area and $40 in a low density area. If everything moved proportionally and the overall cost for labor and materials has increased by 20 percent, then the cost of the high density loop would be $18 and the cost of the low density loop would be $48 dollars. While the high density loop went up by $3 the low density loop went up by $8. It there was no change in demand, the amount of support needed would have gone up.

Now assume that only 40 percent of the high density customer base remains while 80 percent of the low density customer base remains. In this case the loop cost for the high density area is now $45 while the loop cost in the low density area is now $60. The high density area will have increased by $30 while the low density area will have increased by $20. If the benchmark is calculated as the average of these two areas, the amount of support would have actually dropped in this simplistic case.

[10] Accumulated depreciation is the amount of a long-term asset's cost that has been allocated to Depreciation Expense since the time that the asset was acquired.

there should be to the gross plant. With the FCC model, the assumption is that the accumulated reserves are zero. They were zero in 2000 when the forward-looking investment was theoretically placed; they are zero now over thirteen years later. If the two models are to produce comparable results, the accumulated reserves for the FCC model need to be adjusted to represent a more realistic picture.

Q. SHOULD THIS ISSUE BE FURTHER REVIEWED AND POTENTIALLY CORRECTED?

A. Yes. I believe it should be reviewed and corrections made if the review indicates that corrections are warranted.

CURRENT COST MODELING FOR THE RURAL COMPANIES

Q. HOW IS BASIC TELEPHONE LOOP COST CALCULATED FOR THE RURAL COMPANIES?

A. Basic telephone loop cost is calculated for the rural companies using a separation model. The details of this separation model are specified in a stipulation approved by Order No. 03-082. This model takes each company's current financial results found in the Form-I and maps a portion of the plant, reserves, and expenses to the local loop. This model maps all of the local loop related investment and expenses, some circuit and switch investment and expenses, and some general support investment and expenses to the basic telephone service loop.

Q. HOW IS THIS MAPPING DONE?

A. The separation process relies on a set of detailed rules laid out in the 2003 stipulation and the classification of the plant into groups such as subscriber line or local switching, which is done prior to the beginning of the separations process. The actual separations process can be divided up into three different types: 1) direct assignment, 2) factor based separations, and 3) separations based on the results of the other two processes.

Q. DO YOU HAVE ANY CONCERNS WITH THE WAY COST IS CALCULATED FOR THE RURAL COMPANIES?

A. Yes. I have concerns with the way cost is calculated for the rural companies. With the possible exception of the rural companies owned by CenturyLink and

Frontier, almost a hundred percent of the rural companies' customers are served by broadband networks. Voice service is just one of the services these networks are capable of providing. The separation model used to calculate cost appears to be allocating all of the shared network cost and associated expenses to basic exchange service and does not offset these costs by other revenues the companies receive.

Q. IS THIS ISSUE WITH THE SEPARATIONS MODEL OREGON SPECIFIC?

A. No. The issue is not Oregon specific. This issue was discussed in a white paper[11] presented February 7, 2011, to the state member of the Federal-State joint board on Universal Service. The focus of the paper was on federal support, but the issues that are identified are very similar to those that we are encountering with the present model.

Q. SHOULD THERE BE A RESTRICTION ON THE TYPES OF NETWORKS BEING SUPPORTED BY THE OUSF IN THE HIGH COST AREAS?

A. No. There should not be a restriction on the types of networks being deployed. One of Staff's objectives is to ensure the appropriate level of OUSF distributions for the recipient companies to support basic local service. The February 9, 2011, NPRM added several new principles to those found in Section 254, one of which was to reduce waste and inefficiency. When there is a demand for multiple services over a network, it is inefficient to provide a network only capable of voice service. As the number of services riding the network increases, all other things equal, the cost of voice service decreases.

[11] "Separations" by Peter Bluhm, Lorraine Kenyon, and Dr. Robert Loube, February 7, 2011.

Q. IS THE OUSF PRESENTLY FUNDING BROADBAND SERVICES?

A. It is unclear, although the fund should only be used for voice service. It is clear that many of the networks are broadband capable. At this time there is no way of assigning only a portion of the rural companies' network investment and expenses to basic telephone service and the rest to broadband services. The separations process currently being used to calculate support does not appear to be consistent with ORS 759.218 that requires a portion of the network investment and expenses be assigned to the other services sharing the network.

Q. ARE THERE ANY RELATED ISSUES WITH UTILIZING A BROADBAND NETWORK TO PROVIDE VOICE SERVICES?

A. Yes. In those sections of an ILEC's network where they have fiber feeder, the ILEC no longer has an obligation to provide Unbundled Network Elements (UNEs) on that section of the network. The Triennial Review Order[12] states that the ILEC only has an obligation to provide UNEs where the loop can be provided on copper facilities.

[12] FCC 03-36, August 21, 2003.

CALCULATION OF SUPPORT FOR ALL COMPANIES

Q. ONCE COSTS ARE DETERMINED IS THE METHOD FOR CALCULATING SUPPORT FOR RURAL AND NON-RURAL COMPANIES THE SAME?

A. Yes. Once costs have been determined the method of calculating support is the same for both the rural and non-rural companies.

Q. PLEASE DESCRIBE THE STEPS USED TO CALCULATE SUPPORT.

A. The process for both the rural and non-rural companies begins with the calculation of cost per line. In the case of the non-rural companies, this cost per line is calculated by a model at the wire center level. For the rural companies this is done at the total company level. Where a rural company has more than one wire center, all of the wire centers are assigned the same cost per line without regards to actual cost differences.

Q. WHAT HAPPENS IN THE NEXT STEP OF THE PROCESS?

A. In the next step of the process, the cost per line is reduced by any explicit compensation received by the carrier from federal sources specifically targeted to recovery of local loop costs. The cost is also reduced by any explicit support received by the carrier from a federal universal service program. The use of these reductions in the support calculation process is established by ORS 759.425(3).

Q. AFTER THE COST HAS BEEN REDUCED BY FEDERAL SUPPORT, WHAT HAPPENS NEXT?

A. The next and final step required by ORS 759.425(3) is to compare the loop cost to a benchmark. If the per-line cost is above the benchmark, the difference between the cost per loop and the benchmark becomes the company's or wire center's per-line support amount. If the cost is below the benchmark, the support amount is set to zero.

Q. WHAT IS THE DOLLAR AMOUNT OF THE CURRENT BENCHMARK?

A. The current benchmark is $21 and it has not changed since it was calculated in 1999.

Q. HOW IS THE BENCHMARK DETERMINED?

A. The $21 benchmark used in developing the wire center specific support per line was calculated taking a weighted average of the 1999 FCC model results for US West (Legacy Qwest) and GTE (Legacy Verizon) model runs. The stated reason at the time for using the composite output from the model was its relative stability. It was also viewed as a reasonable surrogate for an affordable rate for basic local exchange service.

Q. IS THE BENCHMARK USED FOR THE RURAL COMPANIES THE SAME AS THE ONE USED FOR THE NON-RURAL COMPANIES?

A. Yes. The $21 benchmark used in the separations model for the rural companies is the same benchmark that was used to calculate the support the non-rural companies. Order No. 03-082 established the link between the benchmark used by the non-rural companies and the benchmark used by the rural companies.

Q. WAS A DIFFERENT BENCHMARK USED IN THE MOST RECENT SUPPORT CALCULATIONS?

A. No. The $21 benchmark was used in calculating the unadjusted support for the rural companies. The unadjusted support was later reduced in negotiations by introducing a second, unofficial $30 benchmark.

Q. HOW WAS THE BENCHMARK OFFICIALLY CHARACTERIZED?

A. The value of the benchmark was set in Order No. 00-312[13] and it was there that it was characterized as an affordable cost for basic local service. The cost coming out of the model consisted not only of accounting costs it also consisted of a return on investment, which gave it all of the components necessary to be a rate; thus, it became the affordable rate for basic telephone service.

Q. IS THE BENCHMARK REALLY AN AFFORDABLE RATE?

A. There were no studies done to identify the $21 as an affordable rate.

Q. DO THE CURRENT RATES FOR SINGLE-LINE RESIDENTIAL AND BUSINESS SERVICE CLOSELY ALIGN WITH THE BENCHMARK?

A. No. Although there may have been recent rate changes that I am not aware of to meet FCC rate floor guidelines, the rates that I have reviewed do not align closely with the benchmark. Only one of the residential rates was above the benchmark and thirteen out of the thirty-two business rates that I

[13] Docket UM 731 Phase IV, Order No. 00-312, Issue 4, pp. 16-17.

examined were above the benchmark. Most residential rates were significantly below the benchmark, while the business rates were scattered around the benchmark.

Q. SHOULD A COMPANY'S PRICE OF SERVICE BE FORCED TO INCREASE TO THE BENCHMARK LEVEL?

A. No. The price of its basic local service should within reason be determined by the company. The goal of the OUSF is the availability of basic local service at an affordable rate. In most cases, raising basic local service rates is not really consistent with this goal of universal service since it results in customers leaving the company's network. As customers leave the network the relatively fixed cost of the network now has to be allocated to fewer customers, which results in higher unit costs to the remaining customers.

Q. IS THE COMMISSION REQUIRED TO KEEP PRICES FOR BASIC TELEPHONE SERVICE CLOSE TO THE BENCHMARK?

A. ORS 759.425(3)(c) requires the Commission to limit the difference between the price a telecommunications utility with over 50,000 lines may charge for basic telephone service and the benchmark. No specification was made regarding what is an acceptable maximum difference between the price and the benchmark. Prices that exceeded the benchmark would lead to a company getting excess support, which is something the statute is probably trying to block.

Q. HOW IS A COMPANY'S SUPPORT IMPACTED BY THE PRICE IT CHARGES ITS CUSTOMERS?

A. Under the present method of calculating support for both rural and non-rural companies, company specific rates do not come into play. The benchmark is the only rate or rate proxy impacting the level of support. The assumption in both models is that the company's rate is set at or below the benchmark.

Q. DOES ORS 759.425 REQUIRE THE BENCHMARK TO BE A PROXY FOR AN AFFORDABLE COST?

A. No. Although the stated goal of the OUSF is affordable basic local service, there is no stated requirement in ORS 759.425 for the benchmark to be a proxy for an affordable rate. As originally used, the benchmark can and was viewed as an affordable rate for basic local telephone service; however, the benchmark does not have to be an estimate of an affordable rate. Section three in fact establishes the conditions under which the Commission can set or modify the rate and there is no mention of the benchmark being a proxy for an affordable rate or being adjusted for inflation.

Q. DOES ORS 759.425 SPECIFY THE USE OF THE BENCHMARK AND REASONS FOR CHANGING IT?

A. Yes. ORS 759.425(3) explicitly states how the benchmark will be used in the process of calculating support per line. This section of ORS 759.425 also allows the Commission to review and adjust the benchmark as necessary for the following three situations: changes in competition in the telecommunications industry; changes in federal universal service support; and other relevant factors as determined by the commission.

Q. DO YOU THINK THE BENCHMARK SHOULD BE CHANGED?

A. I believe the benchmark value should be changed. If the benchmark is used going forward, it should be tied to the cost of basic telephone service, which is going to be dependent upon how much investment and expense gets assigned to that service.

ALLOCATION OF COST AMONG SERVICES

Q. DO ALL NON-REGULATED SERVICES USING A NETWORK SHARED WITH REGULATED SERVICES HAVE TO GET A SHARE OF THE EXPENSES ASSIGNED TO THEM?

A. Yes. ORS 759.218(1) states that expenses from the non-regulated portion of the business cannot be allocated to the regulated portion of the business. Expenses as used here include both accounting type expenses and expenses related to the return on investment as well as the return of investment.

Q. WHAT EXPENSES ARE GENERATED BY THE NON-REGULATED PORTION OF THE BUSINESS?

A. There are two classes of expenses generated by the non-regulated services riding the network: 1) expenses that are related only to the services themselves and, 2) expenses that they share with all of the other services riding the network.

Q. SHOULD EITHER OF THESE CLASSES OF EXPENSE NOT BE SHARED WITH REGULATED SERVICES?

A. Clearly, expenses that are related only to the non-regulated services should not be shared with the regulated services. There are also network expenses that are related to upgrading the network so the non-regulated services can be provided that possibly should be considered.

Q. HOW SHOULD THE SHARED NETWORK EXPENSES BE TREATED?

A. As a basic principle, all services utilizing the network should be assigned a portion of the cost of the network. Since this assignment is to determine OUSF support, the expense assigned to basic telephone service should not exceed the expense that would be assigned to the service if it were provisioned on a stand-alone voice grade network.

Q. DO YOU HAVE ANY OTHER PRINCIPLES THAT SHOULD APPLY IN DETERMINING HOW SHARED NETWORK EXPENSE SHOULD BE ALLOCATED?

A. Yes. Basic telephone service, for purpose of the allocation of cost, should not be treated differently from any of the other services riding the network or that were intended to ride the network when it was provisioned.

Q. DOES THIS MEAN YOU ARE ADVOCATING THAT ALL SERVICES GET AN EQUAL SHARE OF THE NETWORK COST?

A. No. There are a number of issues that need to be resolved about how expense is assigned to the services that the network was designed to provide. The principle of equal treatment means that basic telephone is not treated differently from any of those other services.

Q. CAN YOU SUMMARIZE THE PRINCIPLES THAT SHOULD APPLY WHEN DETERMINING THE AMOUNT OF EXPENSE ASSIGNED TO BASIC TELEPHONE SERVICE?

A. Yes. There are two principles: 1) The expenses assigned to basic telephone service should never exceed the expenses that would be assigned if the service were provided on a stand-alone voice-grade network; and 2) any method of allocation of expense to basic telephone service should treat it the same as any other service the network is intended to provide.

ALTERNATIVES TO ALLOCATING COST

Q. WHAT IS THE PRIMARY PURPOSE OF THE OUSF?

A. The primary purpose of the OUSF is to ensure basic telephone service is available at a reasonable and affordable rate. In order to accomplish this, companies must invest in the high cost areas where the return on the company's investment would normally not be sufficient to justify the investment. The OUSF supplies the additional revenues above those that the company could earn from the revenues generated by the network. In other words, the OUSF fills the gap between the basic telephone service revenue requirement and the revenues generated by basic telephone service at the prices set by the Commission. The revenues generated by basic telephone service include both the revenues derived from the customer and the support provided by the FCC such as the High Cost funds.

Q. WHAT IF THERE ARE OTHER REVENUES BESIDES THOSE MENTIONED THAT ARE GENERATED BY THE NETWORK?

A. Under this scenario, one alternative would be to allocate the cost among the services generating the revenues and then proceed as normal. Another alternative would be to identify all of the revenues generated by the local loop network and from those revenues and the expenses determine if the company was making the allowed rate of return on this investment. If the company wasn't making the allowed rate of return, the company would receive a level of OUSF support that would allow it to achieve the targeted rate of return.

Q. WHICH IS THE BETTER WAY TO DETERMINE THE LEVEL OF SUPPORT A COMPANY NEEDS?

A. The present method of determining support, when applied to a multi-service network, requires staff to first find a method of allocating expenses to basic telephone service, and then to adjust those expenses with a benchmark and revenue offsets. Each of these steps requires making a number of assumptions. With the total revenue methodology, the estimated revenues are compared to the revenue requirement to determine the short fall. The number and magnitude of the assumptions with this methodology are much less than with the allocation methodology.

Q. CAN THE COMMISSION TAKE INTO ACCOUNT NON-REGULATED REVENUES?

A. No. It was determined that ORS 759.218 did not allow non-regulated revenues to be used to establish the amount of support that a company needs.

Q. SHOULD THE NON-REGULATED SERVICES BE REQUIRED TO PAY FOR THE USE OF THE REGULATED NETWORK?

A. Yes. Each non-regulated service using the network should be billed a reasonable fee by the regulated side of the business. The fee should be set as if the services were being provided by a separate business unit.

Q. IF SUCH FEES WERE ESTABLISHED, WOULD IT BE POSSIBLE TO USE THE ALTERNATIVE REVENUE BASED METHODOLOGY

A. Yes. If the fees were properly established for the various services, the much simpler revenue based methodology could be used.

STAFF RECOMMENDATIONS

Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING COST MODELING?

A. Yes. The present FCC model used to calculate the wire center cost assumes that there is no accumulated depreciation when it calculates the revenue requirement used to develop loop cost. This assumption of the model needs to be reviewed and a determination regarding its appropriateness needs to be made in this phase of the docket.

Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING THE BENCHMARK?

A. Based on the finding of the FCC model review, the benchmark should be modified to ensure it accurately reflects an affordable cost of basic telephone service. These changes should reflect not only changes in the cost modeling process; they should also reflect changes in the amount of cost assigned to basic telephone service.

Q. DO YOU HAVE ANY PROPOSALS REGARDING THE ALLOCATION OF EXPENSE AMONG SERVICES USING THE NETWORK?

A. Yes. The Commission should establish a set of prices that the regulated side of the business could charge the non-regulated side of the business, which when multiplied by the appropriate demand units would be used to adjust the basic telephone service revenue requirement.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

CERTIFICATE OF SERVICE

UM 1481- Phase 3B

I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 24th day of April, 2014 at Salem, Oregon

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