

EXECUTIVE SUMMARY

WASHINGTON PART D INTERCONNECTION COST DOCKET

POLES, DUCTS, ROW UNBUNDLED PACKET SWITCHING SUPPLEMENTAL NONRECURRING ELEMENTS

Study ID # 6041

2001
Nonrecurring Cost Study

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Market Services And Economic Analysis Organization

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A. PURPOSE, SCOPE, AND APPLICATION

This study estimates forward-looking nonrecurring total element long run incremental costs Qwest will incur to provide Unbundled Elements. Nonrecurring costs represent the one-time costs that are incurred in order to establish and disconnect the service. The study identifies the costs for various work activities involved in providing the service. The study results represent fully allocated 2001 costs and may be used for pricing and other management decisions.

B. DESCRIPTION OF SERVICE

ACCESS TO POLES, DUCTS, CONDUITS AND RIGHT OF WAY

Poles, Ducts and Right-Of-Way fees are intended to recover the costs associated with a CLEC's access to Qwest's facilities. Detailed information can be obtained from Exhibit D of the SGAT.

The cost elements are as follows:

Pole Inquiry Fee – The cost is per inquiry.

Innerduct Inquiry Fee – The cost is per inquiry.

Field Verification Fee Poles – The cost is per manhole.

Field Verification Fee Manholes – The cost is per manhole.

Planner Verification – The cost is per manhole.

Manhole Verification Inspector – The cost is per manhole.

Manhole Make-Ready Inspector – The cost is per manhole.

Right-Of-Way Inquiry – The cost is per inquiry.

Right-Of-Way Document Preparation – The cost is per request.

UBUNDLED PACKET SWITCHING

Customer Channel:

UPS Customer Channel connectivity from the QWEST ATM to the Remove DSLAM. This element consists of: DSLAM functionality (programming of the port and card, splitter and Heikimian Test Head), and Virtual channel that will serve as the originating and terminating points for Virtual Path Connections (VPCs) and Virtual Channel Connections (VCCs) (transport between the DSLAM and Qwest ATM).

Shared Distribution Loop:

Subloop is defined as any portion of the loop that is technically feasible to access at terminals in Qwest's outside plant, including inside wire (owned by Qwest). An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case and/ or digging up underground to reach the wire or fiber within.

Such access points may include, but are not limited to, the pole or pedestal, the network interface device (NID), the minimum point of entry, the single point of interconnection (at multi-unit premises), the main distribution frame, Serving Area Interface (SAI) and/or the remote terminal, and the feeder distribution interface (FDI).

B. DESCRIPTION OF SERVICE (Cont'd)

Unbundled Distribution Subloop:

Shared Distribution Subloop is defined as making available the opportunity for the CLEC to offer advanced data services on the distribution loop simultaneously with an existing end user's analog voice grade service (POTS) which is provided by Qwest. The voice circuit is originating at the Qwest Central office and terminates at the Network Interface at the customer location. The data originates at the CLECs Remote location, which has been established at the technically feasible distribution interface point within the local loop.

ATM Switch Interface Port

Unbundled packet ATM Switch Interface Port:

- DS1 or DS3 interface is the physical entry point into the ATM Cell Relay Service Network.
- This UNE is a prerequisite to ordering an Unbundled Packet Switching Customer Channel

ATM Cell Relay Service ports are the physical entry points into the ATM Cell Relay Service Network. They are the originating and terminating points for Virtual Path Connections and Virtual Channel Connections. Ports include the electronic equipment used in connecting these service elements to the ATM Cell Relay Service Network. They enable customers to allocate bandwidth to applications at customer-designated transmission speeds of up to 1.5 Mbit/s, 45 Mbit/s or 155 Mbit/s.

C. STUDY METHODOLOGY

The Nonrecurring Cost Program (NRC) performs mechanized cost calculations associated with the one time labor expense resulting from a customer request for service. Inputs to the calculations include: labor time, probability of occurrence, labor rate, and expense factors. Formatting commands performed by the program generate Total Element Long Run Increment Cost (TELRIC) results.

Following is a description of the required data inputs:

Time Estimates:

The time estimate is the average amount of time required to perform a particular work function. Time estimates are obtained from subject matter experts who represent the groups doing the work.

Probabilities:

A probability is the percentage of time Qwest performs a particular work function in the provision of a particular service offering. Probabilities are developed from reports and from the input of Subject Matter Experts.

Labor Rates:

Directly assigned labor rates are based on expense data from the general ledger journal file (Service Order Processing/Other) and from the incurred expenses of Account 6534

(Plant) and 6535 (Engineering). The directly assigned labor rates consist of costs that can

be attributed to the function being performed and are forward looking based on the wage

C. STUDY METHODOLOGY

and salary index, the percent change in the post-retirement benefits, and the Consumer Price Index. Components that make up labor rates include: basic wages and salaries, supervision and support, benefits, and other miscellaneous costs.

Expense Factors:

The program applies expense factors to the direct cost. The factors include Commercial Marketing, Network Support, Directly Attributable, and Common.

Once the service provisioning process has been identified, the appropriate times, Probabilities, and labor rate/work group identifies are formatted into NRC Program input data sheets. The process specific input files are then inserted into the NRC Program. The program user selects run options on a menu, and the NRC program then accesses the appropriate input from the NRC program workbook spreadsheets to calculate cost results.

The cost calculations consist of Labor Time times Probability of Occurrence times Labor Rate equals Direct Cost. Added to the Direct cost are appropriate Expense Factors that calculate and display **Total Direct (TELRIC)** Total Element Long Run Incremental Cost, **Direct plus Network Support**, **Direct plus Network Support plus Attributable**, and **Fully Allocated Costs**. (See *Section D, Description of Total Element Long Run Incremental Costs* for detailed description of the various cost levels).

D. DESCRIPTION OF TOTAL ELEMENT LONG RUN INCREMENTAL COSTS

Qwest Communications uses an incremental method to estimate product and service costs. It provides a measurement of costs over a period of time long enough to fully adjust to change output (e.g., size of facilities, levels of investment) to optimally accommodate this change. This methodology is forward looking in nature (i.e., it uses the latest technology costs or replacement costs). Since this incremental methodology is forward looking, it does *not* measure historic investment decisions of the corporation.

The QWEST incremental format disaggregates the cost results on a unitized basis into the components shown below:

Total Service Long Run Incremental Cost (TSLRIC) -- Total Service Long Run Incremental cost is the forward-looking cost avoided (or added) by discontinuing (or offering) an entire service or group of services in the most efficient manner, holding constant the production of all other services produced by the firm. This cost is often referred to in economic terms as the *direct* cost.

Shared Cost (SC) -- The cost associated with the provision of multiple services (service family). This cost is not volume sensitive and is eliminated only if the entire service family is discontinued.

Total Service Long Run Incremental Costs plus Shared Costs (TSLRIC + SC) -- The total Service Long Run Incremental Costs for a service plus the Shared Costs of a family of services.

Total Element Long Run Incremental Cost (TELRIC) -- Total Element Long Run Incremental cost, as defined by the Federal Communications Commission, is the sum of the forward-looking direct cost incurred in the production of a network element (as opposed to an

entire service), attributed costs considered as shared under TSLRIC terminology and selected administrative costs considered as common under TSLRIC terminology.

D. DESCRIPTION OF TOTAL ELEMENT LONG RUN INCREMENTAL COSTS

Common Cost (CC)

For TSLRIC purposes, common costs are the current cost incurred for the benefit of the enterprise as a whole. This cost does not vary with the provision of a service or a service family. These costs are sometimes referred to as *general overhead costs*. The Common Cost added to the TSLRIC + SC produces a **Fully Allocated Cost (FAC)** as required by commission rules.

For TELRIC purposes, common costs are the current cost incurred for the benefit of the enterprise as a whole, after those costs that vary with the provisioning of individual network elements are removed. The costs removed from common for TELRIC purposes are included in TELRIC itself. **Total Element Long Run Incremental Cost plus TELRIC common costs (TELRIC + CC)** form the basis for pricing of Interconnection network elements. TELRIC + CC is the equivalent of fully allocated cost as the term is applied to network elements.

Typically, the costs identified by these cost categories include capital costs for depreciation, return, and income taxes. TSLRIC also includes ongoing operating costs for: maintenance expense, assignable administration expense, product management expense, pre sales expense, sales compensation expense, expensed right to use fees, ad Valorem taxes and business fees.

E. STUDY ASSUMPTIONS

The cost factors used in this study are based on Prescribed Lives.

F. STUDY SUMMARY

Study Summary

Study Name	<i>Washington Interconnection Docket</i>	
Study Requester	<i>Terri Million</i>	
Type of Study	<i>Total Element Long Run Incremental Costs (TELRIC)</i>	
Study ID	<i># 6041</i>	
Study Applications	<i>Pricing Decisions and Tariff Support</i>	
Completion Date	<i>November 29, 2001</i>	
Cost Analyst	<i>Dan Deffley</i>	
Cost Models Used	Model	Version/Release Date
	<i>ENRC</i>	<i>ENRC 214</i>
Cost Factors Used	Factor	Effective Date
	<i>Directly Assigned</i>	<i>02/01</i>
	<i>Directly Attributable</i>	<i>02/01</i>
	<i>Common</i>	<i>02/01</i>
Cost of Money	<i>9.63%</i>	
Major Cost Drivers	<i>Labor Times, Labor Rates and associated weightings.</i>	

Summary of Results
Commission Prescribed Costing & Pricing

State: Washington

<i>Cost Element</i>	<i>Total Direct</i>	<i>State Cost/Price Factor 1 .1962</i>	<i>State Cost/Price Factor 2 .0405</i>	<i>Total Cost or Price</i>
POLE INQUIRY FEE - PER INQUIRY	\$350.15	\$68.70	\$16.96	\$435.81
INNERDUCT INQUIRY FEE - PER INQUIRY	\$244.08	\$47.89	\$11.82	\$303.80
FIELD VERIFICATION FEE - POLES PER POLE	\$19.19	\$3.77	\$0.93	\$23.89
FIELD VERIFICATION FEE - MANHOLES PER MANHOLE	\$162.20	\$31.82	\$7.86	\$201.89
PLANNER VERIFICATION Per Manhole	\$12.84	\$2.52	\$0.62	\$15.99
MANHOLE VERIFICATION INSPECTOR Per Manhole	\$86.37	\$16.95	\$4.18	\$107.50
MANHOLE MAKE-READY INSPECTOR Per Manhole	\$230.32	\$45.19	\$11.16	\$286.67
RIGHT-OF-WAY INQUIRY PER INQUIRY	\$388.34	\$76.19	\$18.81	\$483.35
RIGHT-OF-WAY DOCUMENT PREPARATION	\$115.16	\$22.59	\$5.58	\$143.33
UPS CUSTOMER CHANNEL AND SHARED DISTRIBUTION LOOP INSTALL	\$42.63	\$8.36	\$2.07	\$53.06
UPS CUSTOMER CHANNEL AND SHARED DISTRIBUTION LOOP DISCONNECT	\$6.37	\$1.25	\$0.31	\$7.93
UPS CUSTOMER CHANNEL AND UNBUNDLED DISTRIBUTION SUBLOOP INSTALL	\$50.14	\$9.84	\$2.43	\$62.41
UPS CUSTOMER CHANNEL AND UNBUNDLED DISTRIBUTION SUBLOOP DISCONNECT	\$6.37	\$1.25	\$0.31	\$7.93
UPS CUSTOMER CHANNEL AND CLEC PROVIDED LOOP INSTALL	\$42.63	\$8.36	\$2.07	\$53.06
UPS CUSTOMER CHANNEL AND CLEC PROVIDED LOOP DISCONNECT	\$6.37	\$1.25	\$0.31	\$7.93
UPS DS1/DS3 ATM SWITCH INTERFACE PORT INSTALL	\$136.56	\$26.79	\$6.62	\$169.97
UPS DS1/DS3 ATM SWITCH INTERFACE PORT DISCONNECT	\$40.34	\$7.91	\$1.95	\$50.21