

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION
COMMISSION

In the Matter of the Review of) DOCKET NO. UT-023003
Unbundled Loop and Switching Rates; the)
Deaveraged Zone Rate Structure; and)
Unbundled Network Elements, Transport,)
and Termination)
)

**REBUTTAL TESTIMONY OF
DR. HOWARD SHELANSKI
ON BEHALF OF VERIZON NORTHWEST INC.**

ECONOMIC FOUNDATIONS

May 12, 2004

1 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

2 A. I briefly address here the claim made by AT&T, and in particular by Mr.
3 Turner, that Verizon's loop costs are "embedded" because they use as a
4 starting point certain characteristics of Verizon's existing configuration for
5 its loop plant. As I describe below, Mr. Turner's argument is incorrect: the
6 fact that Verizon starts with certain characteristics of its existing network,
7 such as the location of distribution areas, rather than taking an entirely
8 "scorched node" approach, does not make its model embedded, but rather
9 is compliant with TELRIC and a reasonable means of accounting for real-
10 world constraints on loop placement for which any economically rational
11 model must account. It is furthermore important to keep in mind that just
12 because Verizon's cost model reflects real-world, existing facility locations,
13 which is not the same thing as valuing the modeled facilities at the
14 embedded cost of their real-world counterparts. This is something that
15 Verizon's model explicitly does *not* do: incorporation of existing plant
16 locations in the cost model is not the same as incorporation of embedded
17 costs. While Verizon does do the former because it is economically
18 efficient, it does not do the latter.

19 **Q. DOES TELRIC REQUIRE THAT A LOOP MODEL IGNORE REAL-
20 WORLD CONSTRAINTS ON HOW LOOP PLANT CAN BE ROUTED?**

21 A. No. In fact, any economically correct model *must* take such real-world
22 constraints into account. The forward-looking costs of loop plant include
23 the costs of having to deal with such constraints, including the presence of

1 geographic features such as rivers, zoning requirements, and rights of
2 way restrictions. These constraints will not change, even in the
3 hypothetical TELRIC world under the current pricing rules. As a result,
4 any network that served Verizon's customers would have to reflect these
5 constraints and ignoring them would result in an incorrect estimate of
6 forward-looking costs.

7 **Q. IS USING EXISTING LOCATIONS AS THE STARTING POINT FOR THE**
8 **MODELED NETWORK A REASONABLE APPROACH TO TAKING**
9 **THESE REAL-WORLD CONSTRAINTS INTO ACCOUNT?**

10 A. Yes. Verizon's existing network configuration obviously already accounts
11 for the various constraints I noted above. Since those constraints will not
12 change going forward, the existing locations of the basic points in the
13 network configuration (e.g., wire center locations, customer locations,
14 distribution terminals, and distribution areas) would be unlikely to change
15 significantly even if the network were built entirely from scratch.

16 **Q. DOES THE FACT THAT VERIZON'S MODEL STARTS WITH THE**
17 **LOCATIONS OF CERTAIN KEY POINTS IN THE NETWORK MEAN**
18 **THAT THE MODEL IS MEASURING EMBEDDED COSTS AS AT&T**
19 **CLAIMS?**

20 A. No. As I have previously explained in my direct testimony, the use of
21 existing network characteristics does not make a model "embedded." The
22 key question is whether those existing characteristics are efficient -- if they
23 are, then there is no reason they should be changed in a forward-looking

1 model. Here, the locations in question, such as the location of distribution
2 terminals or SAs, reflect how Verizon’s engineers and network planners
3 have solved the real-world problem of how to route a telephone network
4 as efficiently as possible, taking into account real-world constraints such
5 as private property rights, zoning considerations, and traffic flow. This
6 approach is consistent with TELRIC and provides a reasonable approach
7 to modeling forward-looking efficiencies, while taking into account real-
8 world constraints on how the network can be configured. It is far superior
9 to a methodology that simply ignores everything between the wire center
10 and the model’s presumed customer locations.

11 **Q. WOULD A SCORCHED-NODE APPROACH THAT ATTEMPTED TO**
12 **CONSTRUCT THE ENTIRE ROUTING CONFIGURATION FROM**
13 **SCRATCH ENTAIL ADDITIONAL COSTS THAT WOULD NEED TO BE**
14 **TAKEN INTO ACCOUNT?**

15 A. Yes. If one posits an entirely new “scorched node” network configuration,
16 then the full costs of that approach must be included. In particular, one
17 would have to include today’s costs for obtaining rights of way along the
18 newly drawn routes and for the placement of facilities such as DLCs,
19 which are likely to be significantly higher than what Verizon previously
20 paid for rights of way because, for example, many areas are much more
21 developed. It is economically incorrect to “mix and match” new,
22 supposedly more efficient, routes with the rights of way costs for *existing*
23 routes. Verizon’s approach takes advantage of the efficiency of using

1 existing rights of way, while that efficiency would be lost in an entirely
2 hypothetical, scorched node approach.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4 **A.** Yes.