3. However, as TRACER pointed out in its brief, by looking only at individual end-user locations and the demand from that end-user in modeling DS1 costs, as opposed to accounting for the numerous circumstances where it is possible to aggregate the demand from a number of end-user customers located in the same high-rise building or complex, Qwest understates the efficiencies that can be achieved by deploying OC3 fiber-based architectures. *See* TRACER's Opening Brief at 9, ¶15. While the Commission notes TRACER's argument, it does not respond to it in the 32<sup>nd</sup> Order, it simply accepts Qwest's utilization figures because they reflect a "pattern . . . whereby the utilization decreases with the capacity of the equipment." 32<sup>nd</sup> Order at ¶204, n. 203.

- 4. TRACER requests that the Commission reconsider the utilization assumed for OC3 architectures in light of TRACER's argument and Mr. Weiss's testimony or rehear the issue, requiring Qwest to quantify the circumstances where it is able to aggregate the demand from multiple end-users located in the same high-rise building or complex.
- 5. The Commission also rejected TRACER's proposal that the 100% fiber fill rate adopted in the FCC High Cost proceeding be used in Qwest's model for determining the costs of high capacity loops, because TRACER failed to show that the record supported this proposal, that Qwest's model sizes cables consistently with the FCC's model, or that inserting a 100% fill rate in Qwest's model would satisfactorily address breakage. 32<sup>nd</sup> Order at ¶205.
- 6. As the FCC stated in its Tenth Report and Order in Federal-State Joint Board on Universal Service, CC Docket No. 96-45, FCC 99-304 (1999), at paragraph 208:

Finally, we affirm our tentative conclusion that the input value for fiber fill in the federal mechanism should be 100 percent. The majority of commenters addressing this specific issue agree with our tentative conclusion. AT&T and MCI contend that fiber feeder fill factors of 100 percent are appropriate because the allocation of four fibers per integrated DLC site equates to an actual fill of 50 percent, since a redundant transmit and a redundant receive fiber are included in the four fibers per site. AT&T and MCI explain that, because fiber

capacity can easily be upgraded, 100 percent fill factors applied to four fibers per site are sufficient to meet unexpected increases in demand, to accommodate customer churn, and, to handle maintenance issues. Similarly, SBC asserts that fiber fill factors of 100 percent can be obtained because they are not currently subject to daily service order volatility and are more easily administered. In contrast, BellSouth advocates that we employ projected fills estimated by BellSouth engineers. As noted above, these estimates are unsupported and we reject them accordingly. In sum, we find that the record demonstrates that it is appropriate to use 100 percent as the input value for fiber fill in the federal mechanism.

(Emphasis added). Thus, the FCC concluded that 100% fiber fill was appropriate because the allocation of four fibers per site provided a redundant transmit and a redundant receive fiber, which was sufficient to handle "maintenance" issues (i.e., breakage).

7. Here, Qwest also assumes four fibers per site in its modeling. *See* Exhibit 1102 (true ring and collapsed ring diagrams); Tr. 2056, Il. 9-21; Tr. 2058, I. 20 – 2059, I. 9. With 100% redundancy assumed in the Qwest cost study, just as with the FCC cost study, there is ample allowance for breakage. Accordingly, TRACER requests that the Commission reconsider its rejection of TRACER's proposal. Alternatively, TRACER requests that the Commission allow rehearing of this issue, particularly given the fact that, as the FCC noted, AT&T and MCI had explained in the High Cost proceeding that four fibers per site were sufficient to meet unexpected increases in demand, accommodate customer churn, and handle maintenance issues and SBC acknowledged that 100% fiber fill factors can be achieved. According to Mr. Buckley, with respect to fiber sheath fill, all Qwest did was mechanically apply the 65% fill prescribed by the Commission in its voice grade loop cost proceeding, UT-960369. Tr. 2057, I. 25 – 2058, I. 2. Qwest offered no meaningful engineering analysis of what fiber fill factors can be efficiently achieved.

## B. VERIZON'S ICM COST METHODOLOGY

- 8. TRACER argued that Verizon's cost studies inappropriately design a network to meet both existing and future demand and, then, assign the spare capacity to the working lines in existence today (Collins Direct, Ex. T-1170 at 33; Klick Direct, Ex. T-1310 at 14), thereby effectively "charging today's customers including CLECs for facilities they do not need, raising the cost of competitive entry and forcing them to subsidize customers who will enter the market in the future." Klick Direct, Ex. T-1310 at 14-15; see also Tr. 3724; lines 18-25.
- 9. TRACER pointed out the FCC in its Tenth Report and Order in Federal-State Joint Board on Universal Service, CC Docket No. 96-45, FCC 99-304 (1999), at paragraphs 199-201, concluded that proper costing should not be determined by modeling ultimate demand:

We also affirm our tentative conclusion that the fill factors selected for use in the federal mechanism generally should reflect current demand and not reflect the industry practice of building distribution plant to meet ultimate demand. As we explained in the Inputs Further Notice, the fact that industry may build distribution plant sufficient to meet demand for ten or twenty years does not necessarily suggest that these costs should be supported today . . .

...We find unpersuasive GTE's assertion that the input values for distribution fill factors should reflect ultimate demand. In concluding that the fill factors should reflect current demand, we recognized that correctly forecasting ultimate demand is a speculative exercise, especially because of rapid technological advances in telecommunications. . Given this uncertainty, we find that basing the fill factors on current demand rather than ultimate demand is more reasonable because it is less likely to result in excess capacity, which would increase the model's cost estimates to levels higher than an efficient firm's costs and could potentially result in excessive universal service support payments.

...GTE also claims that, in a competitive environment, facilities-based competitors would build plant to serve ultimate demand. We find, however, that these unsupported claims do not demonstrate that reflecting ultimate demand in the fill factors more closely represents the behavior of an efficient firm and will not result in the modeling of excess capacity. . . . Moreover, we believe that universal service support will be determined more accurately considering current demand, and not ultimate demand. Although firms

may have installed excess capacity, it does not follow that the cost of this choice should be supported by the universal service support mechanism. As growth occurs, however, we anticipate that the requirement for new capacity will be reflected in updates to the model.

(Emphasis added).

- 10. The Commission rejected TRACER's argument, stating only that "[t]he FCC's model was intended to estimate the cost of providing universal service, not UNEs. We do not believe the FCC's decision provides guidance for the specific costing issue we have before us." 32<sup>nd</sup> Order at ¶350.
- 11. In the Tenth Report and Order the FCC was determining the proper inputs for estimating the forward-looking economic cost of supported services. The 32<sup>nd</sup> Order offers no explanation or rationale for why the same logic and decisions should not apply with equal force to the selection of inputs for estimating the forward-looking economic costs of UNEs. CLECs, in purchasing UNEs, should not be required to pay for an ILEC's excess capacity, particularly when, as found by the FCC, reflecting ultimate demand in the distribution fill factors does not reflect the behavior of an efficient firm. Including the costs of building distribution plant sufficient to meet demand for ten or twenty years in today's UNE loop prices is not necessary or appropriate given the fact that, as growth occurs, the requirement for new capacity will be reflected in updates to the cost models used.
- 12. More importantly, it must be recognized that the UNEs costed by Verizon's ICM will be used by CLECs to provide universal service. It is nonsensical to say that universal service costs should be determined using current demand, and not ultimate demand, but, on the other hand, say that the costs of the UNEs to be used by CLECs in providing universal service should be determined using ultimate demand, and not current demand. If universal service costs should not include the