

14. *Network Assumptions—Specific Network Inputs.* In addition to our tentative conclusion that a forward-looking pricing methodology should more closely account for the real-world attributes of the routing and topography of an incumbent LEC's network, we believe there are a number of aspects of the current efficient network assumption that might benefit from clarification or modification. We discuss some of these issues below, and we encourage parties to identify additional steps we might take to produce prices that satisfy the objectives we have identified.

15. We seek comment on the network routing assumptions that would be consistent with our tentative conclusion that prices should account for the real-world attributes of the routing and topography of an incumbent LEC's network. Specifically, we seek comment on the importance of the locations of existing rights-of-way, existing poles, and existing conduit for all wireline carriers when new facilities are built. We also seek comment on whether there is any theoretical basis for an approach that does not assume the existence of current roads, buildings, and natural obstacles. We request parties to comment on whether and how existing rights-of-way should be accounted for in network routing assumptions. Parties supporting the use of existing rights-of-way as a basis for network routing assumptions should explain how states can best determine current rights-of-way routes, and how such routes can be compared to the routes of incumbent LEC facilities and of the routes generated by computer cost models. We ask parties to explain how their proposed network principles reflect the variables than incumbent and competitive LECs consider in making routing and construction decisions. To the extent parties propose principles based on the real-world attributes of an incumbent LEC's existing network, they should explain in detail how a state commission would establish the forward-looking cost of an existing network, and how such a costing approach differs from "rate-of-return or other rate-based" methodologies prohibited under section 252(d)(1). 47 U.S.C. 252(d)(1). We also ask parties to comment on the applicability, if any, of the Commission's conclusion in the *USF Platform Order* that incumbent LEC networks are an inappropriate basis to use to determine outside plan design because they "may not represent the least-cost, most-efficient design in some cases." Finally, we invite parties, and in particular state commissions, to

comment on whether, and how, our tentative conclusion to account more closely for the real-world routing and topography of an incumbent's network would affect the ability of carriers to use computer cost models.

16. We seek comment on the technology assumptions that should be assumed in developing UNE prices. We invite parties to comment on how our tentative conclusion above affects the technology assumptions used to develop UNE prices. We request parties to comment on the relevance to the development of UNE prices of the Commission's statement in the *USF Platform Order* that existing incumbent LEC plant likely does not reflect forward-looking technology choices. We seek comment on how to determine prices for equipment types that are no longer widely used in the industry, such as analog switches or older versions of digital loop carrier systems. We also seek comment on how an approach that replicates an incumbent LEC's existing technology compares to a reproduction cost methodology.

17. We encourage parties to identify the specific factors that influence their decisions with respect to how quickly to deploy new technology. How, if at all, should we factor in the uncertainty associated with the timing and efficiency of new technology? Of what relevance, if any, is the pace at which incumbent LECs have deployed new technologies in the past? Is there evidence of the diffusion rates of new technology in competitive markets as opposed to monopoly markets that might inform our analysis?

18. We seek comment on certain specific cost input issues. Structure sharing refers to how much of the cost of installing poles, digging trenches, and placing conduit would be shared on a forward-looking basis by the incumbent LEC with other entities. The more sharing that is assumed, the lower the cost to the incumbent LEC of providing the element. We seek comment on the guidance the Commission should provide to state commissions on the method for establishing structure sharing percentages, particularly in light of our tentative conclusion, above. Should sharing opportunities that were available at the time plant was build be considered? How relevant are an incumbent LEC's actual sharing percentages? What other sources of data might be relevant? We request parties identify factors that either encourage or discourage parties from sharing construction costs today and explain how these factors should be reflected in determining UNE prices. Parties should provide empirical data with respect to

their experiences sharing construction costs with other entities.

19. A fill factor represents the percentage of capacity of a particular facility or piece of equipment that is used on average over its life. Increasing fill factors effectively lowers costs by reducing the amount of spare capacity allocated to working units. We seek comment on the appropriate guidelines for states to follow in establishing fill factors. What factors do states currently consider in developing fill factors? How relevant are an incumbent's existing fill factors in establishing forward-looking fill factors? Should they be dispositive in light of our tentative conclusion, above? If not, what other evidence should be considered? Are carrier of last resort obligations relevant to determining the appropriate fill factors? Would the fill factors of other incumbent LECs be relevant to demonstrate achievable efficiencies? We seek comment whether carriers would operate at higher or lower fill factors as the level of facilities-based competition increases in a market. We request that parties submit empirical evidence that distinguishes between the fill factors that carriers experience in competitive markets and monopoly markets. We also seek comment on how fill factors are likely to vary as the rate of demand growth varies. Finally, we seek comment on methods for quantifying dynamically efficient fill factors on a forward-looking basis.

20. One of the key issues in determining unbundled switching prices is the switching discounts. In setting switching rates, state commissions have had to determine the appropriate mix of new switches, growth switching equipment, and technology upgrades to existing equipment. This issue arises because switch manufacturers typically offer a relatively large price discount for an entirely new switch and a smaller discount on growth or upgrade equipment added to an existing switch. The Commission has rejected assumptions of both 100 percent new switches and 100 percent growth equipment.

21. Because switching equipment has a high degree of modularity, carriers over time grow their switches and upgrade them with new technology as it evolves over time on the premise that this is a better way to minimize costs than purchasing a switch large enough to satisfy anticipated demand over the entire life of the switch. We seek comment on whether unbundled switching costs should be based on the prices that an efficient incumbent LEC or other entrant would pay for switching