continues to purchase. This amounts to a "tax" of $85, or $17 per unit on purchases from the competitor.[26]

20. Suppose, instead, that the penalty takes the form of a fixed dollar payment. In our example, the effect would be identical if, instead of forfeiting a per-unit discount of $1 per unit, the buyer were forced to pay a penalty of $85 if its purchases from the dominant firm fell to 85% of its total purchases. What is important is the magnitude of the penalty, not the manner in which it is imposed. For example, Farrell considers the effect of a reduction in the *average* discount, which can be effected entirely through a penalty that takes the form of an increase in the unit price, or entirely through a fixed dollar penalty, or through some combination of the two types of penalties.[27]

21. The same deterrent to shifting demand to a rival is achieved if the purchase commitment is a minimum percentage of the customer's total purchases from the ILEC in the recent past, rather than a minimum share of the customer's current purchases. For example, if a customer is required to take 90% of its purchases from the ILEC in the previous year in order to obtain a discount or avoid a penalty, a shift of more than 10% of the previous year's purchases from the ILEC to a rival would result in a "tax" that would increase the effective price of purchasing service from the rival.

22. Finally, the penalty provision in a loyalty contract can involve *conditioning the availability of a benefit* on the customer committing to making a large share of its purchases from the ILEC. The most prominent examples are ILEC loyalty contacts that condition circuit portability – the ability to terminate one special access circuit and replace it with another without incurring a

[26] Note that, in this example, the price of the last 5 units is actually *negative* since the customer would spend $935 if it purchased 85 units but only $900 if it purchased 90 units. Thus, the effective unit price of the last five units purchased is *minus* $7 (=-$35/5).

[27] *See Farrell Reply Declaration* ¶ 11.

termination penalty – on a customer's commitment to maintain a significant share of its historic purchase levels from the ILEC. These contracts give special access customers the incentive to make high minimum volume commitments and thereby make them subject to large shortfall penalties if their purchases from the ILEC decline. Once a customer has made such a commitment, the provisions of the contracts impose a "tax" or "penalty" on purchases from a competitor as described above.

V. Examples of Loyalty Provisions in ILEC Special Access Contracts

23. The loyalty provisions in various ILEC special access contracts can be understood as providing rewards to a customer for purchasing a large proportion of its historic or current special access purchase volumes from an ILEC or, equivalently, imposing penalties on the customer for shifting demand to a rival. ILECs achieve "loyalty" in a number of ways.[28]

24. Customers can purchase special access services at rates that are lower than the ILECs' extremely high month-to-month rates only by making *term commitments*, that is, by committing to purchase individual circuits for a fixed number of years. The discounts associated with term commitments are substantial. For example, for DS1 channel terminations in price cap areas, AT&T provides a discount of approximately 60 percent off of the month-to-month rate in legacy Ameritech territory and approximately 50 percent off of the month-to-month rate in legacy Southwestern Bell territory if the customer agrees to a five-year term commitment.[29]

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[28] The examples provided here are not intended to be an exhaustive list of the loyalty provisions in ILEC special access contracts.

[29] *See* Ameritech Operating Companies Tariff F.C.C. No. 1 § 7.5.9(B)(1); Southwestern Bell Telephone Company Tariff FCC No. 73 § 7.3.10(F). We note, however, that the discounts are approximately 30 percent in legacy BellSouth territory and approximately 15 percent in legacy Pacific Bell territory. BellSouth Telecommunications Tariff FCC No. 1 § 7.5.9(A)(1); Pacific

25. Typically, these ILEC contracts contain *penalty provisions for early termination* that apply if a customer terminates service prior to the expiration of a term commitment. Such provisions effectively inhibit customers like tw telecom from shifting special access purchases to alternative suppliers even in those cases in which these alternatives are available, or will be available, at locations that tw telecom serves or wishes to serve in the future. For example, in legacy Ameritech territory, if a customer terminates a circuit prior to the expiration of its commitment term, AT&T imposes a circuit termination penalty. Specifically, if the customer terminates the circuit within the first year of its commitment term, the circuit termination penalty is equal to the sum of all discounts that the customer received while the circuit was in service *plus* 40 percent of AT&T's 12-month monthly recurring rate for each remaining month in the first year of the term.[30] If the customer terminates the circuit after the first year of its commitment term, the termination penalty is equal to the difference between the amount the customer was charged under its subscribed rate and the amount that the customer would have been charged under the rate associated with the term that the circuit was actually in service.[31]

26. In addition, ILEC special access contracts often include significant non-recurring charges for each channel termination. For example, AT&T imposes a non-recurring installation charge of $900 for DS1 channel terminations in legacy Pacific Bell and Southwestern Bell territories.[32]

Bell Telephone Company Tariff F.C.C. No. 1 §§ 7.5.9(A)(1), 7.5.9(I)(1). We discuss the significance of this wide disparity in our discussion of benchmarking below.

[30] *See* Ameritech Operating Companies Tariff F.C.C. No. 2 § 7.4.10(C)(i)(a)(2).

[31] *See id.* § 7.4.10(C)(i)(b).

[32] *See* Pacific Bell Telephone Company Tariff F.C.C. No. 1 § 7.5.9(I)(5); Southwestern Bell Telephone Company Tariff F.C.C. No. 73 § 7.3.10(F)(1). Again, these charges vary significantly among legacy BOC territories. We note that AT&T's non-recurring installation charge is $150 in legacy Ameritech territory, and $650 for the first circuit installed and $275 for

27. Many ILEC contracts offer customers discounts or relief from these early termination penalties (i.e., by providing circuit portability) if a customer *commits to maintaining a large percentage of its historic special access purchases in service* with the ILEC. For example, under CenturyLink's Regional Commitment Program ("RCP") in legacy Qwest territory, a customer must commit to maintaining 95 percent of its previous purchase volume (in dollars) in service with CenturyLink in order to receive a discount off of CenturyLink's month-to-month rates and to receive circuit portability.[33] In addition, under Verizon's Commitment Discount Plan ("CDP") in legacy Bell Atlantic and NYNEX territories, a customer must commit to maintaining 90 percent of its DS1 and/or DS3 purchase volumes (depending on the services that the customer chooses to purchase under the CDP) in service with Verizon in order to receive circuit portability.[34] And, under AT&T's Term Payment Plan ("TPP") "portability commitment" in legacy Pacific Bell and Southwestern Bell territories, a customer must commit to maintaining 80 percent of its DS1 purchase volume in service with AT&T in order to receive circuit portability.[35]

28. Some ILEC volume commitment provisions make benefits regarding channel termination *conditional on purchase commitments for other rate elements*. For example, the revenue-based

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each additional circuit installed in legacy BellSouth territory. *See* Ameritech Operating Companies Tariff F.C.C. No. 2 § 7.5.15; BellSouth Telecommunications Tariff F.C.C. No. 1 § 7.5.9(A)(1).

[33] *See* Qwest Corporation Tariff F.C.C. No. 1 § 7.1.3(B); *see also* Letter from Thomas Jones and Matthew Jones, Counsel to tw telecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, et al., at 16 (filed Apr. 11, 2012) ("*tw telecom April 11 Letter*") (summarizing the provisions of the RCP).

[34] *See* Verizon Telephone Companies F.C.C. Tariff No. 1 § 25.1.3(A)(5); Verizon Telephone Companies F.C.C. Tariff No. 11 § 25.1.3(A)(5).

[35] *See* Pacific Bell Telephone Company Tariff F.C.C. No. 1 § 7.4.18(E); Southwestern Bell Telephone Company Tariff FCC No. 73 § 7.2.22(E).

volume commitment under Qwest's RCP includes revenues generated by both channel terminations and transport circuits.[36]

29. The ILEC contracts that include volume commitment provisions typically require a customer to pay *shortfall penalties* when its actual purchase volume falls short of its contractually committed volume. For example, under Qwest's RCP, if a customer were to shift more than 5 percent of its purchases from Qwest to an alternative provider during the plan's term, and thus fall short of its 95 percent commitment level, the customer would nonetheless be required to pay Qwest for its full commitment level volume.[37] Similarly, under Verizon's CDP, if a customer were to shift more than 10 percent of its DS1 or DS3 purchases from Verizon to an alternative provider during the plan's term, and thus fall short of its 90 percent commitment level, the customer would nonetheless be required to pay Verizon for its full commitment level volume.[38] In a particularly egregious example, under AT&T's TPP "portability commitment," if a customer were to shift more

[36] *See* Qwest Corporation Tariff F.C.C. No. 1 § 7.1.3(B)(1). Other ILEC special access contracts condition the availability of discounts or benefits on commitments by the customer to purchase *non-special access services* from the ILEC. For example, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** Conditions like this have two related effect. First, they add limitations on the ability of rival suppliers to compete with ILECs to provide other services to the limitations on their ability to compete to provide special access services. As in the case of special access services, these conditions deny scale economies to rival suppliers and reduce their incentives to make investments in cost-reducing innovations. Second, and related, they raise the prices of the other services by reducing the competition that ILECs face in supplying them.

[37] *See* Qwest Corporation Tariff F.C.C. No. 1 § 7.1.3(B)(3)(c).

[38] *See* Verizon Telephone Companies F.C.C. Tariff No. 1 § 25.1.7(B); Verizon Telephone Companies F.C.C. Tariff No. 11 §§ 25.1.7(B).

than 20 percent of its DS1 purchases from AT&T to an alternative provider during this term, and thus fall short of its 80 percent commitment level, AT&T would charge the customer a monthly penalty of $900 for each circuit by which the customer's purchases fell short of its commitment level volume.[39]

30. Many of these contracts also require customers that are experiencing increases in their circuit purchases from the ILEC to commit to maintaining a large share of this *growth* with the ILEC in order to avoid penalties. That is, these contracts impose penalties unless a customer increases its commitment when its purchases significantly exceed its initial commitment. For example, under AT&T's TPP, AT&T imposes a $900 monthly "overage" penalty for each circuit in excess of 124% of a customer's initial purchase commitment unless the customer increases its commitment to make up for the overage.[40] Under this provision, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**.[41] This clearly creates an enormous incentive for a customer to increase its commitment level as its requirements increase, which then has the effect of reducing the size of the market available to ILEC rivals in

[39] *See* Pacific Bell Telephone Company Tariff F.C.C. No. 1 § 7.4.18(E)(4)(b) (indicating that the monthly shortfall penalty is equal to the nonrecurring channel termination charge for each circuit by which the customer falls short), § 7.5.9(I)(5) (indicating that the nonrecurring channel termination charge is equal to $900); Southwestern Bell Telephone Company Tariff F.C.C. No. 73 § 7.2.22(E)(4)(b) (indicating that the monthly shortfall penalty is equal to the nonrecurring channel termination charge for each circuit by which the customer falls short), § 7.3.10(F)(1) (indicating that the nonrecurring channel termination charge is equal to $900).

[40] *See* Pacific Bell Telephone Company Tariff F.C.C. No. 1 § 7.4.18(E)(4)(c); Southwestern Bell Tariff FCC No. 73 § 7.2.22(E)(4)(c).

[41] *See tw telecom April 11 Letter* at 7.

subsequent periods. This, in turn, has the effect of severely limiting, or foreclosing entirely, the ability of rival suppliers of special access services to compete for any growth in a customer's requirements.

31. Finally, even at the expiration of an ILEC contract term, it would be extremely costly for a customer to shift any significant portion of its purchases of special access channel terminations to ILEC rivals. This is so because the customer would be required to pay the ILEC's extremely high month-to-month rates during the period from the end of the original contract until the initiation of a new one, which would likely be a significant period of time.[42] For those locations to which the ILEC controls the only last mile facilities, the customer would be required to pay month-to-month rates until a competitive provider could deploy last mile facilities and initiate service. And even for those few locations to which a non-ILEC had already deployed last mile facilities, the customer would be required to manage the transition of its customers from the ILEC's network to the alternative provider's network—a process that tw telecom and others have explained would be extremely burdensome if a large number of customers were involved.[43] Verizon claims that a customer can remain on an expiring plan for a two-month "grace period" and manage its transition to an alternative wholesale provider during this brief window.[44] However, in light of the factors

[42] *See Comments* at 28-30.

[43] *See id.* at 29-30 ("Among other things, the competitor would be required to coordinate with each of its affected retail customers individually to schedule a mutually agreeable time at which its service can be interrupted and the necessary network modifications performed, dispatch service representatives to each of its affected retail customers' premises to establish a new network interface, and coordinate with third-party private branch exchange vendors where necessary to perform further equipment modifications."); *see also tw telecom August 21 Letter* at 7-8.

[44] *See* Letter from Evan T. Leo, Counsel for Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 *et al.*, at 4-5 (filed July 16, 2012).

described above, tw telecom and others have concluded that such a period would likely be far too short for the company to switch to non-ILEC facilities at a significant number of locations.[45]

32. Together, all of these factors – term commitments for individual circuits with penalties for early termination, high non-recurring charges, contracts that condition discounts and benefits on minimum purchase requirements, penalties for failure to increase minimum purchase commitments to accommodate growth in purchases, and contract structures that provide virtually no ability to shift purchases to ILEC rivals after expiration of the contract term – explain why tw telecom and other customers have been unable to shift more than a modest portion of their requirements for special access service to alternative suppliers. Because the penalties for doing so would be so large, the incentives of tw telecom and other customers to shift purchases to ILEC rivals at the beginning of a contract term, during the term of the contract, and at the end of the contract term, are substantially diminished, if not altogether eliminated. tw telecom and other customers can only retain the flexibility to shift purchases to alternative suppliers, thereby subjecting ILECs to effective competition, if they pay rates that exceed, by a wide margin, the rates that are available under ILEC contracts that do not provide that flexibility and/or if they forego other contractual benefits such as circuit portability.

VI. How ILEC Loyalty Contracts Lead to Higher Special Access Rates

33. There are a number of mechanisms that lead to higher special access rates when firms like tw telecom must effectively purchase a large percentage of their total requirements from the ILEC in order to avoid the penalty provisions in ILEC loyalty contracts.

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[45] *See Comments* n.60; *see also tw telecom August 21 Letter* at 7.

34. First, note that the demand curve faced by the ILEC is the market demand curve for special access minus the quantity that other ("fringe") suppliers would supply at each price. However, if the quantity that can be sold by the fringe is limited by the fact that the buyer must purchase a large share of its historic purchase volume from the ILEC in order to avoid a penalty, the demand curve faced by the ILEC becomes less elastic. As a result, the price that the ILEC is able to charge to firms like tw telecom rises.

35. Second, limiting the sales of rival suppliers of special access can deny them economies of scale, thus raising their costs. As Elhauge puts it:

> Suppose [that] ...[o]ther firms stand poised to enter the market, or to expand until they achieve sufficient scale to reduce their costs to [those of the monopolist] ...in which case competition will drive prices down to [the monopolist's cost]....To prevent this competitive outcome, the monopolist announces a loyalty program....As a result, rivals cannot enter, or expand enough to achieve their minimum efficient scale, and the buyers all continue to pay [the monopoly price]...which is [higher than] the...price they would have paid but for the loyalty program.[46]

36. Similarly, Dennis Carlton, Patrick Greenlee, and Michael Waldman note that "tying the competitive good to the monopoly good can deny necessary scale to the rival firm, leading the rival firm to exit, and allowing the monopolist to set a higher price for the complementary good."[47] In this case, the complementary good is special access service at those locations at which the rival is able to provide service. Contracts that limit purchases from rival suppliers of special access service can prevent these rivals from achieving the scale economies that they need to compete.

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[46] Elhauge, *supra* note 24, at ¶ 3.

[47] D.W. Carlton, P. Greenlee, and M. Waldman, "Assessing the Anticompetitive Effects of Multiproduct Pricing," 53 *Antitrust Bulletin* 587, at 602 (2008).

37. The Commission has previously recognized the importance of scale economies to entities that wish to compete with ILECs in providing special access services. For example, in its *Triennial Review Remand Order*, the Commission noted:

> Competitive LECs face large fixed and sunk costs in deploying competitive fiber, as well as substantial operational barriers in constructing their own facilities. The costs of loop construction are fixed, meaning that they are largely independent of the particular capacity of service that a customer obtains at a particular location. For fiber-based loops, the cost of construction does not vary significantly by loop capacity (i.e., the per-mile cost of building a DS1 fiber loop does not differ significantly from the cost to construct a DS3 or higher-capacity fiber loop), but such costs do vary based on the length of the loop. The most significant portion of the costs incurred in building a fiber loop results from deploying the physical fiber infrastructure into underground conduit to a particular location, rather than from lighting the fiber-optic cable. The record reflects that for these reasons, LECs do not typically construct fiber loop facilities at lower capacity levels, such as DS1 or DS3, but rather install high-capacity fiber-optic cables and then use electronics to light the fiber at specific capacity levels, often "channelizing" these higher-capacity offerings into multiple lower-capacity streams.[48]

38. Finally, Carlton, Greenlee, and Waldman present a dynamic version of this issue. They note that, "If tying by the monopolist serves to lower the rival's output, then the anticipation of such tying tomorrow can lower the rival's R&D expenditure today and in this way increase the rival's

[48] *In re Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd. 2533, ¶ 50 (2005) ("*Triennial Review Remand Order*").

marginal cost in subsequent periods."[49] In the current context, rival suppliers of special access to tw telecom may not undertake investments that would reduce their costs in later periods, thus reducing their ability to compete at locations where they do not currently provide service, because they anticipate that future sales at those locations will be too small to justify such investments.

39. In summary, by using special access loyalty contracts to discourage customers from purchasing service from rivals, an ILEC can make the demand that it faces less elastic, thus permitting the ILEC to charge higher prices. It can also deny economies of scale to its rivals and discourage R&D expenditures than can lower rivals' costs, thus either creating a cost advantage for the ILEC, or increasing any cost advantage that it might otherwise have had. Because special access rivals are less able to compete, the ILEC is able to increase its rates.

VII. Many ILEC Loyalty Provisions Do Not Have Efficiency Justifications

40. It is important to understand that many of the highly restrictive provisions that tw telecom must accept in order to obtain significant discounts from the (undiscounted) month-to-month rates, to obtain other contractual benefits, or to avoid penalty provisions, cannot be justified by any efficiencies associated with those terms.[50] Here, we explain why many of the claimed efficiency justifications for the restrictive contract terms are unsupportable.

41. As explained above, many special access contracts that are offered by ILECs when they provide special access services effectively require the customer to continue to make a very large percentage of its historic purchase levels from the ILEC in order to receive a discount from the

[49] Carlton, Greenlee, and Waldman, *supra* note 47, at 603.

[50] Although penalties for early termination are not necessarily inefficient, the manner in which they are imposed by ILECs does raise efficiency concerns. We discuss this issue in detail below when we consider possible remedies to encourage the competitive supply of special access.

month-to-month rates or to obtain other contractual benefits. Under the terms of these contracts, two customers that purchase the same *percentage* of their historic levels from the ILEC receive the same percentage discount or other benefits even if the *numbers* of circuits that they purchase are vastly different. Alternatively, two other customers that purchase the same *number* of circuits can obtain vastly different discounts or benefits if the *percentages* of their historic purchase levels are vastly different. To the extent that there are economies of scale in the provision of special access, those economies are more likely to depend on the *number* of circuits purchased by a customer than on the *percentage* of the customer's historic purchases that these circuits represent.[51] Indeed, there is no reason to believe that the scale economies that an ILEC experiences in providing a given number of circuits would be any different if the customer that purchases those circuits from the ILEC also purchases additional circuits from a rival.

42. The absence of an efficiency justification for these discount arrangements is further revealed by the fact that the percentage purchase condition is often imposed on purchases in each of a number of widely dispersed geographic areas within an ILEC territory. That is, in order to obtain a discount or other benefit in any area that is served by the ILEC, a customer may be required to meet a percentage purchase condition that applies to the entire territory (which generally includes areas in several states) covered by an ILEC contract.[52] Thus, even if one geographic area within this

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[51] For this reason, Verizon's claim that "selling in greater bulk creates efficiencies by, among other things, reducing the number of individual transactions needed to sell a specified volume," although it might justify a lower price for a larger commitment *volume*, does not justify lower prices for a larger commitment *percentage*. *See* Letter from Donna Epps, Vice President, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, at 7 (filed Mar. 27, 2012).

[52] Note that the discounted price need not be a competitive price but need only be significantly less than the month-to-month price.

territory were to experience robust competition, a customer may be forced to purchase all or a very large proportion of its requirements from the ILEC in that area in order to obtain the discount on ILEC service in other areas in the territory where the ILEC does not face competition. It is highly unlikely, to say the least, that an ILEC's costs in providing special access to a particular customer in one of its service areas are affected to any significant degree by the amount of special access services that it provides to that customer in another area.[53] Consistent with our previous discussion, an ILEC is likely to benefit from such contracts because they discourage rivals from entering some of their service areas and because they discourage rivals from undertaking investments that would eventually make them significant rivals in many or all of their service areas.

43. The barrier to entry to a rival may be especially significant if it wishes to serve customers, such as tw telecom, who have locations in several areas and who wish to purchase their channel termination services from a small number of suppliers. By severely limiting the sales that the rival can make in some areas, and thus making entry in those areas unprofitable to the rival, the ILEC contracts may make it impossible for the rival to serve customers who have demands for special access service in a number of areas. Moreover, even where entry is not completely foreclosed, the contract provisions can significantly raise the rival's costs and thus limit the share of the market that it is able to serve.[54]

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[53] For example, it is highly unlikely that AT&T's provision of special access circuits to tw telecom in Florida in any way affects the costs that AT&T incurs when providing special access circuits to tw telecom in North Carolina, and vice versa. However, in order to receive circuit portability in either one of these states, tw telecom must commit to a volume commitment that applies throughout legacy BellSouth territory, which includes both of these states. *See* BellSouth Telecommunications Tariff F.C.C. No. 1 § 2.4.8(B).

[54] For example, tw telecom has observed that "customers are increasingly demanding that carriers serve most or all of their locations . . . . If TWTC cannot obtain access to Qwest's loop facilities on reasonable terms and conditions, it cannot profitably serve all of [a] customer's locations,

44. In an earlier filing, Verizon purported to provide the "legitimate business reasons" for offering discounts and benefits contingent on volume commitments.[55] However, nothing in its explanations support the need for discounts or benefits that are based on the percentage of a customer's historic levels of special access purchased from Verizon. Moreover, as explained above, the fact that Verizon's discounts plans "are very popular with Verizon's special access customers"[56] is evidence not of the attractiveness of the discount plans themselves but only of the unattractiveness of the alternatives offered by Verizon.

45. The first "legitimate business reason" advanced by Verizon is that "volume discount plans are easier to manage and administer and allow providers to avoid the expense of constantly renegotiating the terms of service."[57] However, this ease of management and administration is unrelated to the volume commitments in Verizon's discount plans. Verizon's special access offerings are set forth in its tariffs, and the terms of its tariffs govern the transaction whether or not a customer chooses to purchase services under a volume-based discount plan.

46. Another "legitimate business reason" advanced by Verizon for its volume discount plans is that they "reflect economies of scale associated with providing a larger amount of service to a single

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even if it had been economically feasible to construct loops to the larger locations." *See* Declaration of Scott Liestman on Behalf of tw telecom inc., ¶ 11 (dated Sept. 21, 2009) (attached as Attachment C to tw telecom Opposition to Qwest Petition for Forbearance, WC Docket No. 09-135 (filed Sept. 21, 2009)).

[55] Declaration of Quinn Lew and Anthony Recine on Behalf of Verizon, ¶ 28 (dated Feb. 24, 2010) (attached as Attachment B to Reply Comments of Verizon, WC Docket No. 05-25 *et al.* (filed Mar. 19, 2010)) (hereinafter "*Lew and Recine Declaration*").

[56] *Id.* ¶ 10.

[57] *Id.* ¶ 28.

customer."[58] However, as explained above, even if volume discounts for larger *amounts* of purchases could be justified by economies of scale, they do not justify conditioning those discounts on the purchase of a particular *percentage* of a customer's historic purchases of special access from Verizon.[59]

47. Finally, Verizon defends its volume discounts because they "have allowed Verizon to make ... substantial capital investments with some certainty that its investments will be recovered through special access revenues."[60] Again, however, this does not justify conditioning discounts on the percentage of a customer's historic purchases from Verizon. If a customer were to purchase a smaller percentage of its requirements from Verizon, presumably Verizon would make smaller special access investments and would be able to recover the costs of those investments from the proceeds of special access purchases that are actually made by the customer. Although the percentage requirements provision of its contracts does provide "certainty" to Verizon, the only thing that is "certain" is that it will be substantially shielded from competition.

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[58] *Id.*

[59] The distinction between quantity discounts and market share discounts is well understood. *See, e.g.*, P. E. Areeda and H. Hovenkamp, *Antitrust Law* ¶ 768 at 169 (3d Ed., 2008) (discussing the difference between these two types of provisions). Level 3 distinguishes anticompetitive "volume commitment" requirements over multiple locations from pricing based on the quantity of circuits or bandwidth ordered by a customer to a particular location or on a particular transport route, saying that the latter may reasonably reflect economies of scale in providing higher capacity facilities. *See* Letter from Michael J. Mooney, General Counsel, Regulatory Policy, Level 3, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 29, n.88 (filed Feb. 22, 2012) (hereinafter "*Level 3 February 22 Letter*"). However, Bruce Kobayashi notes that "volume based thresholds could mimic...market share targets by setting lower volume based targets for smaller firms." B.H. Kobayashi, "The Economics of Loyalty Discounts and Antitrust Law in the United States," Law and Economics Working Paper Series, 05-26, at 1, *available at* http://www.law.gmu.edu/assets/files/publications/working_papers/05-26.pdf. We discuss such "tailoring" below.

[60] *Lew and Recine Declaration* ¶ 28.

VIII. Remedies to Encourage Competitive Supply of Special Access

48. The anticompetitive effects of ILEC loyalty contracts arise principally from two types of provisions in tariffs and commercial agreements: (a) volume commitments that effectively require a customer to make a very large percentage of its special access purchases from the ILEC in order to obtain discounts from month-to-month rates or other benefits; and (b) high non-recurring charges, lengthy term commitments, and large early termination penalties that discourage a customer from terminating an ILEC special access service and shifting its purchase to an ILEC rival. In order to provide customers of special access services with the ability to switch from ILECs to lower-priced rival providers of special access the Commission should: (1) reduce the volume commitments in ILEC special access arrangements to a level that does not inhibit shifting a significant share of purchases to ILEC rivals, and (2) permit ILEC special access customers to terminate their purchase of a circuit without penalty provided they have either paid a non-recurring charge that covers any customer-specific sunk costs[61] or have made monthly payments that are sufficient for the ILEC to have recovered those costs. By adopting these proposals, the FCC would encourage more robust competition in the market for special access services while, at the same time, ensuring that ILECs are able to recover their costs, earn a reasonable return on their investments, and offer their customers a wide variety of pricing options.

49. We emphasize that the FCC should adopt these remedies as soon as possible. The ILECs' high market shares in the provisions of DS1 and DS3 services, which we understand to be the services most commonly subject to loyalty contracts, the high entry barriers associated with providing these services, and the absence of plausible efficiencies associated with the loyalty

[61] We discuss this concept in more detailed below.

contracts justify eliminating the harmful effects of those contracts now. There is no need for the FCC to wait to conduct the data gathering and analysis discussed in the *Data Request Order* and the further NPRM in the special access proceeding prior to adopting the remedies we describe herein. Under our proposal, ILECs would still be able to compete for a very large share of special access purchases but such competition would be "on the merits" rather than be distorted by the anticompetitive provisions in current loyalty contracts.

A. Reducing the purchasing commitments in ILEC special access contracts to a level that does not inhibit shifting a significant share of purchases to an ILEC rival

50. We propose that ILECs be required to reduce substantially, or eliminate altogether, the volume commitment that a customer must make to obtain discounts or other benefits.[62] This change would greatly expand the proportion of the special access market for which potential entrants could compete. It would accomplish this result both by reducing the incentives to purchase from the ILEC at the beginning of a contract term and by reducing the disincentives to switch purchases to a rival during the duration of a contract. Thus, for example, if the purchase commitment were 50%, a customer that is currently purchasing 80% of its historic purchases from the ILEC would have the flexibility to terminate circuits without penalty if it were to shift, say, 10% of its purchases to rivals.[63]

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[62] As we note below, Level 3 has proposed that the FCC require that eligibility for discount rates or benefits be available for customers that make a commitment of at least 50% of the amount that the customer spent on special access services in the previous year from the ILEC, a market share that is well below the level that is required by existing ILEC discount plans.

[63] As we discuss below, the ILEC should be permitted to recover any customer-specific sunk costs that are associated with the circuits that are no longer being purchased.

51. The ILECs should also be barred from offering discounts or other benefits individually tailored to the quantity purchased by each customer.[64] That is, to the extent that quantity discounts are justified by economies of scale in serving a customer, the same quantity discounts should be offered to all customers. Accordingly, in order to limit the ability of ILECs to evade a ban on setting a high percentage purchase requirement, ILECs should be prohibited from entering into contract tariffs that condition discounts or benefits on a dollar- or quantity-based volume commitment that is effectively larger than the maximum percentage-based commitment permitted under such a ban.[65]

52. In addition to placing limits on the commitment that a customer must make to obtain discounts from the month-to-month rates or to receive other benefits, the Commission should prohibit provisions that impose penalties in discount arrangements for exceeding a committed number of circuits or a committed level of expenditure. Although this would not, by itself, permit ILEC rivals to compete for *current* purchases of special access, it would constrain the ability of ILECs to prevent customers from shifting the *growth* in their purchases to ILEC rivals.

53. Furthermore, the Commission should also prohibit special access discount arrangements that require commitments to purchase services other than special access. Such tying arrangements

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[64] ILECs frequently tailor contract tariffs to include volume commitments that likely track individual customers' historic purchase volumes. For example, Verizon's Contract Tariff Option 10 provided a discount for a customer that purchased between $49,000,000 and $56,000,000 of special access in one year. *See* Verizon Telephone Companies Tariff F.C.C. No. 1 § 21.11. As Fiona Scott-Morton notes, "a threshold that is buyer-specific may be more of a [competitive] problem." F. Scott-Morton, *supra* note 17, at 4.

[65] Of course, although a ban on tailoring tariffs to the quantities purchased by each individual customer may not altogether prevent an ILEC from using quantity discounts to exclude rivals, it will limit their ability to engage in such behavior. A ban on tailoring will be more effective in promoting competition the more diverse are the amounts purchased by different ILEC customers.

enable an ILEC to leverage its dominance in the market for one or more special access services in order to limit the competition that they face in other markets, including other special access markets in which competition is more robust.

54. If these remedies were adopted and ILEC rivals were able to compete effectively, the need to regulate special access charges, and to determine what those charges should be, would be reduced. However, such a state of affairs is unlikely to occur for some time. ILEC rivals will need to make additional investments in order to increase the number of buildings that they can serve, something that will take a long time.[66] Moreover, to the extent that ILEC rivals have been discouraged from undertaking cost-reducing research and development, the process is likely to take even longer. For these reasons, even if these proposals were adopted, it would be necessary for some time to prevent ILECs from raising special access rates above current discounted levels or eliminating existing benefits.[67]

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[66] The Commission has previously recognized that ILEC rivals face significant obstacles to deploying new facilities. For example, in the *Triennial Review Remand Order*, the Commission noted that "competitive LECs . . . face substantial operational barriers to constructing their own facilities. . . . [T]he construction of local loops generally takes between six to nine months absent unforeseen delay. Competitive LECs describe on our record the possible delays affecting construction decisions and the time it takes to deploy fiber. Often these delays are attributable to problems in securing rights-of-ways from local authorities in order to dig up streets prior to laying fiber, including lengthy negotiations with local authorities over the ability to use the public rights-of-way and obtaining building and zoning permits. Moreover, commenters note that many local jurisdictions impose construction moratoriums which prevent the grant of a franchise agreement to construct new facilities in the public rights-of-way." *Triennial Review Remand Order* ¶ 151.

[67] *See Level 3 February 22 Letter* at 29. Specifically, Level 3 proposed that price-cap LECs should be precluded from conditioning a discount on "a customer's commitment to purchase more than 50% of the amount spent on special access services in the previous year" and that they should be required to "maintain current discount levels and other lock-up benefits contained in discount plans or contract tariffs . . . ." *Id.*

B. Limiting the non-recurring charges, term commitments, and early termination fees that ILECs may impose.

55. We propose that an ILEC should be permitted to impose a one-time, nonrecurring charge for a special access circuit only to the extent that such charge is no higher than the customer-specific sunk costs of providing the circuit. Similarly, we propose that an ILEC should be permitted to set a term commitment for a special access circuit at a duration no longer than is needed to recover the customer-specific sunk costs of providing the circuit and to impose a penalty for terminating a circuit prior to expiration of the term that is no higher than the unrecovered customer-specific sunk costs of providing the circuit.

56. Term commitments (and non-recurring charges) in special access contracts are presumably justified by the need for a carrier to recover its customer-specific sunk costs. These are the costs of facilities that (a) are used to serve a particular customer, i.e., they must be "sunk" in order to serve that customer irrespective of the amount of service taken by that customer, and (b) cannot be shifted to serve a different customer if the first customer ceases taking the service, i.e., the facilities are specific to a customer. Customer-specific sunk costs are thus distinguished both from costs that can be avoided if the purchases by a customer are reduced and from costs for facilities that can potentially be used by a different customer if the first customer ceases taking the service.[68]

[68] An example of a customer-specific fixed cost is the cost of terminating an ILEC's facilities at a building that is occupied by a single potential customer. If that customer stops taking service, the facilities have no alternative use and the cost will already have been incurred. However, if there are several customers in a building and the facilities can be used to serve a different customer, the cost is not customer-specific. Of course, in the latter case, the ILEC must still expect to recover this cost but not entirely from its first customer at that location.

57. To the extent that a carrier incurs customer-specific sunk costs, it must expect to recover those costs during the duration of its contract with that customer.[69] For that reason, we do not dispute Verizon's claim that it needs to "recover the costs associated with deploying facilities."[70] That is, to the extent that an ILEC incurs customer-specific sunk costs, the ILEC can legitimately expect to be permitted to recover those costs through payments from its customers. The relevant questions are the magnitude of those costs and the manner in which they are recovered. Assuming that such costs exist, customers should have the option of paying for customer-specific sunk costs in the form of a non-recurring charge with no term requirement instead of higher monthly payments. If a customer has paid a non-recurring charge for the costs that are specific to it and that cannot be recovered if the customer were to cease taking a service, the ILEC will have already recovered those costs from the customer and there is no justification for imposing a minimum contract term on that customer or, equivalently, imposing a charge if the customer fails to use the service for a minimum period of time.

58. However, there are ways in which customer-specific sunk costs can be recovered without imposing minimum term commitments or penalties for early termination. Moreover, even when term commitments or penalties can be justified, it is important that they not be greater than are needed to promote efficient investments.

59. Large and unjustified penalties for early contract termination can have an effect similar to those of percentage purchase commitments in that they can discourage a customer from switching

[69] The ILEC may, in addition, incur customer-specific costs if a circuit is transferred from the ILEC to a competitive provider. Any circuit migration charges that are imposed when the ILEC circuit is terminated should similarly be limited to the actual costs of making the transfer.

[70] *Lew and Recine Declaration* ¶ 28.

from an ILEC to a competing supplier for part of its requirements by imposing a very large cost for doing so. In that sense, they can "lock in" a purchaser to the ILEC even if a superior competitive alternative were to arise.[71]

60. To analyze whether a particular termination penalty provision is anticompetitive, one must begin by inquiring whether, and the extent to which, the ILEC incurs sunk costs to serve the specific customer. It is notable that the ILEC investments in the facilities that supply virtually all DS1 channel termination circuits have been sunk before an additional customer is served. Legacy special access facilities, owned by the ILEC, exist at most user locations. As a result, the additional costs incurred by an ILEC for connecting a customer to those DS1 channel termination circuits are likely to be modest and to consist primarily of changing software settings and physically cross-connecting existing lines at the customer's building.[72] ILECs could easily recover these costs in the form of non-recurring charges. In such cases, imposing significant early termination charges serves only to prevent customers from switching to an ILEC rival in the future and have no efficiency justification.[73]

61. Even where substantial customer-specific sunk costs are incurred to provision a new customer circuit, the ILEC could still be protected against the risk of early termination without imposing very large termination penalties by providing the customer the option of either: (1) making an up-front payment equal to those costs, or (2) making recurring payments that amortize

[71] As Level 3 has explained, cancellation penalties make it "more difficult to use a price-cap LEC 'bridge' as a tool to reach full competition. The price-cap LECs clearly recognize this and try to prevent it through offering all-or-none terms." *See Level 3 February 22 Letter* at 19.

[72] *See* Comments of Sprint Nextel Corporation – NBP Public Notice # 11, GN Docket No. 09-51, at 43-45 (filed Nov. 4, 2009).

[73] The ILECs justify these termination provisions as necessary to provide them with "revenue stability." Of course, this stability is achieved at the cost of a reduction in competition.

the costs with the additional proviso that any remaining payments would be due if the customer were to terminate the contract before its completion. By tying any termination payment to the sunk costs that are actually incurred by the ILEC, it cannot be used to inefficiently discourage the customer from switching to a rival supplier of special access.[74]

62. Customers that do not choose to pay the non-recurring cost in the form of an upfront charge should pay the same monthly charge as customers that do choose to pay the upfront charge plus an amount that is equivalent, in present value, to the non-recurring charge that they would otherwise pay. Indeed, customers could be given the option of paying the customer-specific sunk costs over any fixed period, including a period that is shorter than the life of its contract with the ILEC, in which case the charge for the sunk costs would be eliminated when those costs had been recovered. In this way, a customer can, in effect, be free to purchase from an ILEC rival without penalty by making its payment for any customer-specific costs over a relatively short period. In any event, there is no justification for a charge that exceeds the ILEC's true customer-specific sunk costs whether it is imposed on a non-recurring or a monthly basis.

63. One benefit of separating the recovery of the ILEC's customer-specific sunk costs and ongoing costs, is that it makes it easier to determine whether the non-recurring charge that is being demanded to recover the sunk costs is commensurate with a reasonable estimate of those costs, something that is obscured in the current arrangement. It also makes it easier to determine whether the term requirement that is being demanded by the ILEC is justified by its need to "recover the costs associated with deploying facilities." If these costs are modest, the required term for a

[74] As we note below, one way for the Commission to limit the amount of these payments would be to use the charges imposed by other ILECs as benchmarks. Of course, this would not impose a significant limit if the charges imposed by all ILECs are inflated.

customer that does not choose the upfront payment option should be short and, in these circumstances, more customers would be likely to choose the upfront payment option.[75] To the extent that the current tariffs provide a large discount only for customers that accept a long contract term, they implicitly treat sunk costs as large, even if that is not the case.

64. There is no efficiency justification for tying a customer's early termination penalty to the *revenues* that would have been received by the ILEC if the customer had completed its contract term, since those revenues may bear little or no relationship to the customer-specific sunk *costs* that the ILEC incurs in serving that customer.[76] Under many ILEC contracts, even if customer-specific sunk costs are a very small percentage of the total revenue that would be generated if the customer completes its contract term, the early termination penalty can be very large. The only possible purpose of such provisions is to prevent a customer from shifting purchases to a rival during the term of its contract with the ILEC.

65. It should also be noted that, where there are customer-specific sunk costs that are recovered in the form of recurring charges, once these costs have been recovered the monthly tariff rates should be reduced by the amounts that are being charged to recover these costs.[77] Thus, if the length of the first contract term is deemed sufficient to recover sunk costs, maintaining rates at the same level during a second (or additional) term would amount to recovering these costs two (or

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[75] A reasonable level for the NRC can be established using an average of customer-specific sunk costs, based on a straightforward cost study of a sample of the ILEC's customers' circuit termination service.

[76] Such penalties can be justified only if a commitment to serve one customer prevents the supplier from serving another, but that is not the case here.

[77] Maintaining a distinction between those parts of a tariff that are intended to recover sunk costs from those that are intended to recover ongoing costs would facilitate implementation of this proposal.

more) times. Multiple recoveries of the same sunk costs are not required to promote efficient investments. For the same reason, the Commission should prohibit ILEC arrangements that impose a penalty if a customer terminates a circuit and connects a new circuit (i.e., the Commission should require ILECs to offer circuit portability), provided that the customer has paid the benchmark non-recurring charge for the terminated circuit. It follows that ILECs should be required to provide special access circuits at rates that do not include any charges to recover customer-specific sunk costs where such costs have previously been recovered from the purchaser.

66. The customer-specific sunk costs that we have been discussing should be treated the same way whether the final customer is served directly by the ILEC or is served through an intermediary. That is, if sunk costs are modest, that should be reflected in all of the ILEC's rates, including special access. There is no justification for waiving the fixed charge, or equivalently imposing a short term requirement, or for reducing monthly rates by a large amount, for a retail customer while, at the same time, imposing a large fixed charge, or a long term requirement, or a high monthly charge on special access purchasers, many of which use special access services as inputs into downstream retail services.[78]

67. Furthermore, we note that the variation in non-recurring charges in ILECs' tariffs for special access channel termination services provides the Commission with the opportunity to benchmark these charges. For example, as noted above, AT&T's non-recurring installation charges for DS1 channel terminations range from $150 in legacy Ameritech territory to $900 in legacy PacBell and Southwestern Bell territories.[79] The Commission should establish as a benchmark for customer-

[78] Of course, sunk costs may differ somewhat between the two cases, but we do not expect these differences to be large.

[79] *See supra* ¶ 26 & n.32.