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Contracts That Impede Entry by More Efficient Telecommunications Rivals

Stanley M. Besen,* Bridger M. Mitchell†

Abstract

Incumbent local telecommunications companies provide data services to business customers through “special access” contracts containing loyalty terms and conditions, including minimum purchase requirements, long contract terms, and “all-or-nothing” provisions. When these conditions are not met, customers face a wide range of “taxes” on purchases from rival suppliers, including both monetary payments and the loss of valuable benefits. The incumbent suppliers have large market shares, so that the contracts are especially likely to discourage entry by more efficient rivals. Regulatory actions by the FCC would have prohibited some provisions of loyalty contracts, but they would not have barred contract conditions based on market shares or imposed penalties based on suppliers’ expected revenues, and even those pro-competitive regulations were subsequently withdrawn. As a result, terms and conditions in Incumbent Local Exchange Carrier (ILEC) special access contracts continue to impose barriers to entry by more efficient rivals.

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Both authors have submitted comments on behalf of competing local exchange carriers (CLECs) and special access customers in Federal Communications Commission (FCC) proceedings. However, the views expressed in this article are their own.

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INTRODUCTION

Terms and conditions in contracts between buyers and sellers may impede more efficient rivals from entering and competing with incumbent firms.¹ For some time, economists have been analyzing these effects.² For example, Aghion and Bolton analyze “whether optimal contracts between buyers and sellers deter entry.”³ They go on to note that these contracts “sometimes block the entry of firms that may be more efficient than the incumbent seller. Entry is blocked because . . . an entrant must either wait until contracts expire, or induce the cus-

1. See generally Philippe Aghion & Patrick Bolton, *Contracts as a Barrier to Entry*, 77 AM. ECON. REV. 388, 389 (1987) (arguing that long-term exclusive contracts create a barrier to entry).

2. See, e.g., Ran Jing & Ralph A. Winter, *Exclusionary Contracts*, 30 J.L. ECON. & ORG. 833, 834 (2013) (“[E]xclusivity contracts . . . protect the incumbent’s position as a monopolist or a dominant firm By offering downstream buyers long-term contracts, the incumbent makes entry less profitable for the potential entrants”); Ilya R. Segal & Michael D. Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296, 297 (2000) (concluding that an “incumbent’s ability to deal with buyers sequentially strengthens its ability to exclude”); see also Luis M. B. Cabral, *Staggered Contracts, Market Power, and Welfare* 7–9, 11 (N.Y. Univ. Ctr. for Econ. Policy Research, Discussion Paper No. DP10095, 2014) (arguing that exclusive, long, staggered contracts create a barrier to entry).

3. Aghion & Bolton, *supra* note 1, at 388.

tomers to break their contract with the incumbent by paying their liquidated damages.”⁴

Greenlee and Reitman have observed that “purchase requirements, coupled with a loyalty discount for buyers who comply with the purchase terms, can function as exclusionary behavior to the detriment of rival firms and competition.”⁵ Carlton, Greenlee, and 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.”⁶ They go on to note that “[i]f 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 marginal cost in subsequent periods.”⁷

The antitrust authorities’ interest in these types of contracts is reflected in papers by Fiona Scott-Morton, then the Deputy Assistant Attorney General in the Antitrust Division of the Department of Justice, and Joseph Farrell, then the Director of the Federal Trade Commission Bureau of Economics. Scott-Morton analyzes “contracts that reference rivals,” an example of which is a contract under which a buyer “will receive a discount on incremental units, or perhaps all purchased units, if it buys [a given percentage] or more of its needs from one seller.”⁸ She notes that contracts that reference rivals “may create a competitive problem unless the provision serves a particular pro-competitive purpose.”⁹ Similarly, Farrell analyzes “loyalty” contracts in which buyers obtain lower prices from a dominant firm if they agree to make at

4. *Id.* at 389.

5. Patrick Greenlee & David Reitman, *Competing with Loyalty Discounts* 2 (U.S. Dep’t of Justice Econ. Analysis Grp., Discussion Paper No. 04-2, 2004) (revised Jan. 7, 2006).

6. Dennis W. Carlton, Patrick Greenlee, & Michael Waldman, *Assessing the Anticompetitive Effects of Multiproduct Pricing*, 53 ANTITRUST BULL. 587, 602 (2008).

7. *Id.* at 603.

8. Fiona Scott-Morton, Deputy Assistant Att’y Gen., Antitrust Div., U.S. Dep’t Justice, *Contracts that Reference Rivals* 3 (Apr. 5, 2012) (transcript available at www.justice.gov/atr/public/speeches/281965.pdf).

9. *Id.* at 4.

least a minimum percentage of their purchases from that firm.¹⁰

This article employs the economic theory of loyalty contracts to analyze the terms and conditions included by ILECs in their contracts for the sale of special access service in a market that provides “dedicated high-capacity connections used by businesses and institutions to transmit their voice and data traffic,”¹¹ and which, according to the FCC, has revenues that “could exceed \$75 billion annually.”¹² The ILECs have attempted to achieve “loyalty” from their special access customers through a wide range of contractual devices. Some involve monetary penalties and others involve withdrawal of benefits, such as limiting the ability of a customer to substitute one purchase from the ILEC for another from the ILEC if the customer shifts some purchases to a rival.¹³ Moreover, although these contracts typically have minimum purchase requirements, they often contain other loyalty features including lengthy contract terms and requirements that customers obtain all of their purchases of services of a given type from the ILEC regardless of the geographic areas in which the services are purchased.¹⁴ Thus, the terms and conditions in ILEC special access contracts provide rich and varied examples of the use of loyalty contracts in practice.

10. *See id.* at 9 (citing Joseph Farrell, Director, Fed. Trade Comm’n, Bureau of Econ., Problems with Loyalty Pricing (Sept. 23, 2011)).

11. *Special Access Data Collection Overview*, FCC.GOV, <https://www.fcc.gov/general/special-access-data-collection-overview-0> (last updated Feb. 27, 2014). Elsewhere, the FCC notes that “[s]pecial access services encompass all services that do not use local switches; these include services that employ dedicated facilities that run directly between the end user and an interexchange carrier’s (IXC) point of presence, where an IXC connects its network with the local exchange carrier’s (LEC) network, or between two discrete user locations.” *Special Access for Price Cap Local Exchange Carriers*, 27 FCC Rcd. 16318, 16319 n.1 (Dec. 18, 2012) [hereinafter *FCC Report and Order*].

12. *Business Data Services in an Internet Protocol Environment*, Tariff Investigation Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 4723, 4743, ¶ 44 (Apr. 28, 2016) [hereinafter *Tariff Investigation Order*].

13. *See id.* at 4764–90 (discussing ILEC contract terms and conditions).

14. *See id.*

I. FCC REGULATION OF SPECIAL ACCESS SERVICE CONTRACTS

In 2005, the FCC began “a broad examination of the regulatory framework to apply to price cap local exchange carriers’ . . . interstate special access services.”¹⁵ Much of the focus of the ensuing proceedings has been on the rates charged by ILECs.¹⁶ ILECs claim that the competition to which they are subject justifies either deregulation of these rates or a substantial lessening of regulation, while purchasers of special access services argue the reverse.¹⁷ Although some have suggested that provisions in ILEC special access contracts and tariffs have limited the competition faced by ILECs,¹⁸ the FCC initially took the view that because “investments were location specific, the entrant incurred sunk costs, making it less likely that the incumbent could successfully use exclusionary strategies to drive the entrant from the market.”¹⁹ As a result, the FCC concluded in 2009 “that sunk investment in the facilities sufficient to discourage exclusionary pricing behavior would also preclude anticompetitive volume and term discounts.”²⁰

Subsequently, however, the FCC began to take note of the growing academic attention to “loyalty” contracts and of the acceptance by the antitrust authorities of the learning from that literature.²¹ The Commission began to recognize that, although there are other potential suppliers of special access services, their ability to compete to provide services was severely limited by the ILECs’ use of contracts that made it difficult for buyers to shift a portion of their purchases to

15. Special Access Rates for Price Cap Local Exchange Carriers, 20 FCC Rcd. 1994, 1995 (Jan. 31, 2005) [hereinafter Special Access NPRM].

16. *See id.*

17. *See id.* at 2002–03.

18. *See, e.g.*, Sprint Nextel Corporation, Comment Letter on Special Access Rates for Price Cap Local Exchange Carriers, 37–42 (Jan. 19, 2010), <https://ecfsapi.fcc.gov/file/7020382081.pdf>.

19. Special Access NPRM, *supra* note 15, at 2029 (footnote omitted).

20. Parties Asked to Comment on Analytic Framework Necessary to Resolve Issues in the *Special Access NPRM*, 24 FCC Rcd. 13638, 13643 (Nov. 5, 2009) (citing Pricing Flexibility Order, 14 FCC Rcd. 14221, 14263–64).

21. *See, e.g.*, Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans, 30 FCC Rcd. 11417, 11425–27 nn.53–54 (Oct. 16, 2015) [hereinafter Initiating Order] (discussing under footnote 53 the case law and under footnote 54 the economic literature).

competing carriers.²² Even when contracts do not explicitly require customers to make a very large percentage of their special access purchases from the ILECs, they often have the same effect because they condition discounts, the avoidance of penalties, or the availability of benefits²³ on this percentage.²⁴ Moreover, the FCC recently noted that its “predictive judgment that ‘irreversible, sunk investment by competitors’ would make it ‘less likely that an incumbent will try to use volume and term discounts to lock in customers’ . . . [was] subsequently found not to be borne out by marketplace developments.”²⁵ Finally, the FCC observed that

[w]hile non-incumbent LEC affiliated [sic] competitive LECs – including, importantly, cable providers – are making great strides in competing to sell Ethernet services, data . . . show that these carriers serve no more than [twenty-five] percent of buildings with business data services demand over their own networks. Further, the data show that the vast majority of off-net services provided by competitive LECs is provided through either incumbent LEC leased facilities or incumbent LEC UNEs [Unbundled Network Elements].²⁶

In its 2016 special access decision, the FCC took action with respect to some of the terms and conditions in ILEC special pricing plans. It stated:

We conclude that “all-or-nothing” provisions that are included in certain of the pricing plans under investigation are unjust and unreasonable practices. We direct the incumbent LECs to remove those provisions from the relevant pricing plans and submit tariff revisions consistent with this Order. We further conclude that certain of the shortfall and early termination penalties contained in the pricing plans are unjust and unreasonable practices to the extent that the penalties exceed expectation damages and direct their removal from the relevant pricing plans under investigation and the submission of tariff revisions consistent with this Order.²⁷

22. *Id.* ¶ 7, at 11420–21.

23. As discussed below, these penalties can involve an increase in the unit price, a fixed dollar payment, or a denial of benefits. *See infra*, note 57 and accompanying text.

24. Some writers treat loyalty and explicit market share discounts as equivalent. *See, e.g.,* J. M. Jacobson, *A Note on Loyalty Discounts*, THE ANTITRUST SOURCE, June 2010, at 9. We intend the term “loyalty contracts” to apply to any provisions that condition price reductions to the acceptance by the purchaser of limitations on its behavior.

25. Tariff Investigation Order, *supra* note 12, ¶ 92, at 4763.

26. *Id.* ¶ 91 (footnote omitted).

27. *Id.* ¶ 88, at 4762. “‘All-or-nothing’ provisions . . . require customers to commit all their relevant in-service purchases . . . to a single pricing plan, which limits the ability of customers to allocate their purchases across

Significantly, the FCC did *not* take action on two key “loyalty” contract provisions: percentage commitments, under which a buyer obtains a lower price or other benefits only if it agrees to purchase a very large percentage of a given service from the ILEC,²⁸ and term commitments,²⁹ under which a buyer obtains a lower price or other benefits only if it agrees to purchase a given service from the ILEC for a relatively long time.³⁰ Instead, the FCC designated these provisions for further investigation.³¹

This article (i) describes the terms and conditions in ILEC special access contracts and tariffs; (ii) analyzes the effects of these provisions on competition between ILECs and rival suppliers of special access service; (iii) places this analysis in the context of the economic literature on “loyalty” contracts; and (iv) describes the actions taken by the FCC in 2016 to ameliorate some of the adverse competitive effects of the terms and conditions of ILEC special access contracts. Although we find that some of the FCC’s actions would have been likely to increase the competition faced by ILECs, we also conclude that they fell short of a complete removal of the barriers created for ILEC competitors by the terms and conditions in ILEC special access tariffs and contracts, and, in any event, these actions have since been reversed.

different plans.” *Id.* ¶ 95, at 4765 (footnotes omitted). “Shortfall fees are charges assessed on a purchaser . . . if its purchases fall below a percentage-based or other volume commitment . . . as a precondition for obtaining a pricing plan’s discount or circuit portability benefit.” *Id.* ¶ 116, at 4773 (footnotes omitted). “Early termination fees . . . are charges assessed on a purchaser . . . when the purchaser terminates its use of a circuit or circuits prior to the expiration of the . . . service term.” *Id.* ¶ 142, at 4785 (footnotes omitted).

28. *Id.* ¶ 462, at 4894 (footnote omitted) (“Percentage commitments are requirements included in some incumbent LEC tariff pricing plans that require customers to commit to buy, over the term of the plan, a high percentage of the amount of services they elect to purchase when initiating or renewing purchases through a tariff pricing plan.”).

29. *Id.* ¶ 469, at 4895–96 (footnote omitted) (“We declined to address term commitments in the Tariff Investigation Order . . .”).

30. *Id.* ¶ 467, at 4895.

31. *Id.* ¶¶ 465–66, 469, at 4895–96.

II. THE BASICS OF ILEC SPECIAL ACCESS LOYALTY CONTRACTS

The provisions in ILEC special access contracts take a number of forms.³² Some provide rate discounts for a single circuit only if a customer commits to a *minimum contract term* for that circuit.³³ Others condition circuit portability—the ability to terminate one special access circuit and replace it with another without incurring a termination penalty—on a customer’s commitment to maintain a significant share of its historic purchase levels from the ILEC.³⁴ Still others penalize a customer if it does not commit to increase its minimum volume commitment to the ILEC by including a large proportion of the *growth* in the customer’s purchases from the ILEC.³⁵ Many special access contracts contain a combination of these types of provisions.³⁶ Although the precise form of these contract provisions differ, they all have the same intent and effect: to encourage customers of special access to purchase a very large share of their special access requirements from the ILEC, or, equivalently, to discourage these customers from purchasing a significant share of these requirements from ILEC rivals.

32. We provide specific examples of provisions in ILEC special access contracts and tariffs below.

33. See, e.g., U.S. GOV’T ACCOUNTABILITY OFF., GAO-07-80, FCC NEEDS TO IMPROVE ITS ABILITY TO MONITOR AND DETERMINE THE EXTENT OF COMPETITION IN DEDICATED ACCESS SERVICES 31 (2006) [hereinafter GAO REPORT] (describing AT&T’s “severe termination penalties”).

34. See, e.g., PETER BLUHM & ROBERT LOUBE, NAT’L REGULATORY RESEARCH INST., COMPETITIVE ISSUES IN SPECIAL ACCESS MARKETS 74 (rev. ed. 2009) (describing the “portability commitment” option that AT&T-SBC’s offers with its “Term Payment Plan”).

35. See, e.g., Reply Declaration of Joseph Farrell on Behalf of CompTel, Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25, ¶ 18 (Jul. 29, 2005) [hereinafter “Farrell Reply Declaration”], <https://ecfsapi.fcc.gov/file/6518716219.pdf> (explaining that a customer on Southwestern Bell Telephone Company’s (SBC’s) DS1 Term Payment Plan “is likely to [increase its plan commitment level] given the ‘growth penalty’ that applies if it does not promptly commit its unexpected demand growth to SBC.”).

36. In addition, some ILEC contract provisions condition discounts, benefits, or the avoidance of penalties on the customer’s commitment to purchase a minimum quantity of services other than special access channel termination or of services other than special access services (i.e., services other than either channel terminations or mileage). Although we explain below that such provisions can be problematic, these are characterized more accurately as tying arrangements rather than loyalty provisions.

Others who have analyzed competition in the market for special access services have reached this basic conclusion. For example, a National Regulatory Research Institute study concluded “that a combination of terms in discount plans may be allowing ILECs unreasonably to cement their market power by limiting the ability of buyers to shift special access circuits to competitors *who may have better products, lower prices, or both.*”³⁷ Similarly, the United States Government Accountability Office concluded that

[t]hese types of contracts may inhibit choosing competitive alternatives because the customer does not receive the applicable discount, credit, or incentive if the revenue targets are not met and additional penalties may also apply. Unless a competitor can meet the customer’s entire demand, the customer has an incentive to stay with the incumbent and to purchase additional circuits from the incumbent, rather than switch to a competitor or purchase a portion of their demand from a competitor—even if the competitor is less expensive.³⁸

Moreover, the fact that some carriers “freely” choose these restrictive long-term arrangements is simply an artifact of the very unattractive terms at which the ILECs offer month-to-month service.³⁹ As Farrell observed,

[i]t is a tempting fallacy to think that optional discount plans cannot be harmful simply because consumers select them voluntarily. The claim that voluntary discounts cannot harm consumers assumes that basic month-to-month rates are not affected, but in fact, once an ILEC has contracted with some of its customers for a percentage discount off the month-to-month tariff, it has an incentive to raise the latter above the level that it would have chosen otherwise.⁴⁰

Although the types of contracts offered by ILECs are similar to those offered in other, more competitive markets, this does not mean that the effects of ILEC contracts are benign. ILECs have large market shares and are much larger suppliers than their competitors.⁴¹ Moreover, potential entrants face substantial barriers to entry into the market for special access services.⁴² Indeed, ILECs are the types of dominant firms for which the use of loyalty contracts is

37. BLUHM & LOUBE, *supra* note 34, at 96 (emphasis added).

38. GAO REPORT, *supra* note 33, at 30 (emphasis added).

39. Farrell Reply Declaration, *supra* note 35, ¶ 21.

40. *Id.*

41. See Tariff Investigation Order, *supra* note 12, at 4818–22 (explaining data on market shares and suppliers).

42. Tariff Investigation Order, *supra* note 12, ¶ 3, at 4725.

especially likely to be anticompetitive. Greenlee and Reitman have observed that loyalty discounts are “of particular concern *when the firm offering loyalty discounts is much larger than its rivals.*”⁴³ Similarly, Scott-Morton has noted that “the settings where [such contracts] are most likely to harm consumers and competition involve *dominant firms possessing market power and a high market share.*”⁴⁴ Finally, even Zenger, who believes that loyalty discounts are generally *not* anticompetitive, notes, “If a *dominant* firm is in a position to foreclose such a substantial part of the market that the output of the smaller competitors is suppressed below the minimum efficient scale of production, retroactive rebates can cause anticompetitive harm by jeopardizing the viability of the *dominant* firm’s competitors.”⁴⁵

A. HOW LOYALTY CONTRACTS WORK

As many commentators have observed, contracts that require a customer to make a very large fraction of its purchases from one supplier in order to obtain a significant discount, avoid a significant penalty, or reap a significant benefit, effectively serve as a “tax” on purchases from competitors of that supplier.⁴⁶ A customer will take this “tax” into account when deciding whether to purchase from a competitor.⁴⁷

Even a small increase in price can represent a significant per-unit “tax” on purchases from the rival if the customer continues to make a large share of its purchases from the dominant firm.⁴⁸ In the case of special access services, the result is that rival offerings are uncompetitive, ILEC market

43. Greenlee & Reitman, *supra* note 5, at 2 (emphasis added).

44. Scott-Morton, *supra* note 8, at 5 (emphasis added).

45. Hans Zenger, *Loyalty Rebates and the Competitive Process*, 8 J. OF COMPETITION L. & ECON. 717, 749 (2012) (emphasis added) (citation omitted).

46. *See id.* at 735.

47. As we note below, the effects of the penalties are the same whether they involve fixed dollar payments or rollbacks of previous discounts. *See* Greenlee & Reitman, *supra* note 5, at 5 n.8 (referring to the first type of contract as involving “dollar-one”, “all-unit”, or “rollback” discounts” and noting that they “effectively increase the gain to a customer near the margin for meeting the target, relative to incremental discounts”). *See also infra* note 54.

48. *See* Scott-Morton, *supra* note 8, at 9 (“In essence, the loyalty discount functions like a tax on purchases from the rival.”).

power is increased, and ILECs are able to raise prices.⁴⁹ Moreover, if a customer must commit to a high percentage in order to obtain more favorable rates, terms, and conditions the commitment requirement has much the same effect as an explicit prohibition on purchases from rivals.⁵⁰ Indeed, at times, ILEC loyalty contracts have even induced customers to purchase *more than* the number of special access circuits that they need.⁵¹ We understand that at least one carrier has occasionally purchased “circuits to nowhere” in order to meet volume or revenue commitments and thereby avoid paying shortfall penalties.⁵² This behavior suggests that the marginal price of these circuits was negative, i.e., that the total costs of the customer were actually lower when it purchased additional circuits that it did not use.⁵³

One form of the “tax” or “penalty” under a loyalty contract is a so-called “all-units,” “first-dollar,” or “rollback” discount plan, under which a buyer forfeits the per-unit discount on *all* of the units that it continues to purchase from the firm offering the loyalty discount (that is, the discount is “rolled back”) if its purchases from that firm fall below its purchase commitment.⁵⁴ Alternatively, or in addition, a buyer may be obligated to make

49. Declaration of Professor Einer Elhauge on Behalf of Eisai Inc. ¶ 3, *Eisai Inc. v. Sanofi-Adventis LLC*, No. 3:08 Civ. 4168 (D.N.J. Nov. 17, 2008) (“[A] monopolist can get buyers to agree to be loyal for a nominal “discount” from the price charged disloyal buyers, even though the result of all them agreeing is that they exclude the monopolist’s rivals and then pay higher prices than the but-for competitive price they would have paid.”).

50. See, e.g., Scott-Morton, *supra* note 8, at 9 (“[M]arket share discounts can allow the dominant firm to reduce output while at the same time restricting the buyer’s ability to consume more from rivals.”).

51. See Sprint Corporation, Ex Parte Letter in Special Access for Price Cap Local Exchange Carriers, WC Docket No. 05-25 & RM-10593 (Sept. 23, 2015), <https://ecfsapi.fcc.gov/file/60001325247.pdf> (describing how Sprint has purchased “costly but pointless” special access circuits from ILECs to avoid paying shortfall penalties under its contract).

52. *Id.*

53. See generally Zenger, *supra* note 45, at 743–44 (explaining how the last units sold before the threshold in “retroactive rebate schemes,” i.e. rollback discount plans, have a negative marginal price).

54. E.g., Declaration of Professor Einer Elhauge on Behalf of Eisai Inc., *supra* note 49, ¶ 3, at 1 (illustrating a hypothetical example of how discounts like this may work). For an example of this type of plan, see Greenlee & Reitman, *supra* note 5, at 5 n.8 (explaining that in “dollar-one,” “all-unit,” or “rollback” discounts the discount applies to every unit purchased).

a fixed dollar payment, or lose a benefit, if it fails to meet the purchase requirement.⁵⁵

To see how the “tax” works, consider a customer that purchases a total of one hundred units (“circuits”) of special access from all suppliers. Suppose, further, that under an “all-units” contract, the customer pays a price of \$10 per unit if it purchases ninety units from the dominant firm but \$11 per unit if it makes less than ninety percent of its purchases from that firm. If the customer has been purchasing ninety units from the dominant firm and then shifts five percent of its total purchases to a competitor, purchasing only eighty-five circuits from the dominant firm at the renewal of a contract, the total “tax” is the increase in price $\$11 - \$10 = \$1$ (the “rollback” of the discount) times the number of units that it continues to purchase from the dominant firm, eighty-five. This amounts to a “tax” of \$85, or \$17 per unit on the five units purchased from the competitor.⁵⁶

Suppose, instead, that the penalty takes the form of a fixed dollar payment. The effect would be identical in our example if, instead of forfeiting a per-unit discount of \$1 per unit, the buyer was forced to pay a “shortfall” penalty of \$85 if its purchases from the dominant firm fell to eighty-five percent of its total purchases. As Farrell’s analysis shows, the “tax” takes the form 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.⁵⁷

The penalty provision in a loyalty contract can also involve *conditioning the availability of a benefit* on the customer committing to making a large share of its purchases from the ILEC.⁵⁸ For example, some special access contracts condition

55. See Tariff Investigation Order, *supra* note 12, ¶ 116, at 4773–74.

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

57. See Farrell Reply Declaration, *supra* note 35, ¶¶ 8–11 (illustrating how special access contracts condition penalty exemption or discounts on high volume purchases that make it “unprofitable for a competitor to win any portion of a customer’s business”).

58. See *id.* ¶ 5 (providing an example of benefits conditioned on continued large volume purchases).

circuit portability—the ability to terminate one special access circuit from the ILEC and replace it with another without incurring a penalty—on a customer’s commitment to maintain a significant share of its historic purchase levels from the ILEC.⁵⁹ These contracts give special access customers the incentive to make and maintain high minimum volume commitments in order to obtain and retain the benefits of circuit portability.⁶⁰

B. EXAMPLES OF LOYALTY PROVISIONS IN ILEC SPECIAL ACCESS CONTRACTS

ILECs achieve “loyalty” in a number of ways, including term commitments, penalties for early termination, and volume purchase commitments in their special access contracts.⁶¹ For example, “tariff pricing plan provisions . . . are set at high levels of purchasers’ previous or existing . . . purchases from the incumbent LEC – from [eighty] percent to [ninety-five] percent.”⁶² By committing to these percentages, ILEC customers may obtain substantial discounts from “rack rates.”⁶³ At least as important, they may obtain benefits in the form of circuit portability. The FCC notes, for example, that

while Pacific Bell Telephone’s and Southwestern Bell Telephone’s Term Payment Plans (TPPs) do not impose a percentage commitment on purchasers, each TPP contains a circuit portability option that imposes such a requirement. Circuit portability provides customers, particularly competitive LEC customers, flexibility to disconnect circuits and replace them with others to meet their commitments and thereby not incur early termination penalties. By most accounts, circuit portability provides a crucial non-rate benefit for competitive LECs serving retail customers whose terms of service rarely coincide with the competitive LECs’ underlying pricing plan term commitments with incumbent LECs.⁶⁴

59. *See id.*

60. *See id.* ¶ 11 (arguing that a penalty provision “sets up an automatic and sometimes drastic price cut for any portion of the customer’s business that the customer is considering switching to a competitor”).

61. The examples provided here are not intended to be an exhaustive list of the loyalty provisions in ILEC special access contracts. *See id.* ¶ 5.

62. Initiating Order, *supra* note 21, ¶ 30, at 11431–32.

63. *See* BLUHM & LOUBE, *supra* note 37, at 20 (reporting that over ninety percent of Verizon’s special access revenues from other carriers in 2009 were received under plans that contained discounts from the rack rates).

64. Initiating Order, *supra* note 21, ¶ 34, at 11433–34 (footnote omitted).

Another example of these types of provisions is what the FCC refers to as “All-or-Nothing Requirements.” The FCC notes that these provisions either “require that customers subscribing to one of these plans include all purchases of a specific service type, such as DS1 or DS3, in that one plan for the duration of that plan” or require “customers to commit all of the customer’s relevant type of in-service circuits only at the inception of a portability plan or option.”⁶⁵ According to the Commission,

[i]n either case, customers are unable to choose to keep their purchases out of the initial commitment associated with the portability plan by making a portion of their purchases on a month-to-month basis or through a term only plan or another generally available pricing plan. This limitation precludes customers from managing their business data services purchases in an economically efficient manner, restricting how they purchase services from the incumbent LEC plans and restricting their ability to consider competitive alternatives.⁶⁶

Still another example is what the FCC refers to as “shortfall penalties,” which it describes as “charges assessed on a purchaser . . . if its purchases fall below a percentage-based or other volume commitment specified in a tariff pricing plan as a precondition for obtaining the pricing plan’s discount or circuit portability benefit.”⁶⁷ The FCC then notes “the wide disparity in the amounts of these fees and the methodologies used to calculate them.”⁶⁸ For example, under CenturyLink’s Term Discount Plan, “customers that purchase less than their agreed to number of circuits for more than ninety days are assessed a termination fee for the unused circuits and have their commitment levels reduced.”⁶⁹ Under the Southwestern Bell and Pacific Bell Term Payment Plans, “the fee is assessed monthly based on the number of shortfall circuits multiplied by the non-recurring charge for DS1 channel terminations.”⁷⁰ Observing that “[a]lthough competitive carriers today continue to rely substantially on incumbent LEC [time-division-multiplexing] . . . special access services to serve their

65. Tariff Investigation Order, *supra* note 12, ¶ 96, at 4765.

66. *Id.*

67. *Id.* ¶ 116, at 4773 (footnote omitted).

68. *Id.* ¶ 118, at 4773–74.

69. *Id.* ¶ 119, at 4775 (footnote omitted).

70. *Id.* ¶ 118, at 4774 (describing a wide range of shortfall penalty provisions at ¶¶ 115–122).

customers, . . . the telecommunications market is shifting to more efficient IP technology based services, such as Ethernet.”⁷¹ The FCC concludes that “[e]xcessive penalties combined with high minimum purchase requirements harm competition by preventing competitive LECs from making cost-based choices about whether and when to transition their [time-division-multiplexing] purchases to Ethernet services, whether through purchases or construction.”⁷²

A final example is the use by ILECs of Early Termination Penalties. The FCC describes these as “charges assessed on a purchaser under business data services tariff pricing plans when the purchaser terminates its use of a circuit or circuits prior to the expiration of the applicable service term.”⁷³ According to the FCC,

AT&T explains that if a purchaser’s TDM DS1 channel termination purchases fall below [eighty] percent of the commitment level, the purchaser has two options: the purchaser can “buy down’ (*i.e.* reduce)” its commitment level or it can pay a shortfall fee. Under the “buy down” option, which is equivalent to terminating circuits, the purchaser must pay “to AT&T an amount equal to the number of decreased DS1 channel terminations multiplied by the month-to-month rate multiplied by the number of months remaining for the portability option.” This provision requires customers that choose to buy down their commitment levels to pay a fee based on undiscounted month-to-month rates for the terminated circuits.⁷⁴

Such provisions discourage customers 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 they serve or wish to serve in the future.⁷⁵

Importantly, 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

71. *Id.* ¶ 129, at 4780 (footnote omitted).

72. *Id.* (footnote omitted).

73. *Id.* ¶ 142, at 4785 (footnote omitted).

74. *Id.* ¶ 146, at 4787 (footnotes omitted).

75. *Compare id.* ¶ 149, at 4788 (“We find early termination penalties greater than the revenues the incumbent LECs would have received had the purchaser not terminated the service to be unreasonable.”) *with id.* ¶ 152, at 4788 (finding that “a reasonable early termination fee should be set at a level no greater than the amount of revenue a customer would have paid had it met its minimum commitment”).

terminations to ILEC rivals.⁷⁶ During the period from the end of the ILEC contract until the initiation of service from a competitor, the customer would be required to pay the ILEC's extremely high month-to-month rate.⁷⁷ At locations where the ILEC controls the only last mile facilities, it could be many months until a competitive provider could deploy its own last mile facilities and initiate service.⁷⁸ Moreover, even at those locations where a competitor has already deployed last mile facilities, the transition of customers from the ILEC's network can be extremely burdensome. The FCC itself has noted that "moving purchases to alternative providers and building replacement network facilities requires long term planning and happens over an extended period of time."⁷⁹ In this regard, the FCC has noted that

[a] customer planning to move purchases to other options following the end of a term plan, because of the all-or-nothing provisions, must either pay month to month rates for all of its purchases while it transitions its circuits, or commit to a portability plan with a high commitment level that limits the amount of circuits it can remove from the incumbent LEC's network without penalty through the next term or (2) choose term commitments for all its circuits and forgo circuit portability for those circuits where it would be the most cost effective plan. Accordingly, customers are constrained in controlling

76. *See id.* ¶ 483, at 4893 (discussing incumbent LEC pricing plans that commonly contain provisions related to the expiration of a purchaser's agreement that "may impose unreasonable constraints on purchasers whose agreements have expired in light of the long term nature of broadband service agreements and the substantial logistics required to move purchases to other providers or construct facilities to self-provision").

77. *See id.* ¶ 482, at 4893 ("Competitive LECs have asserted certain provisions in incumbent LEC tariff pricing plans that apply upon expiration of a purchaser's agreement These provisions include requirements . . . that force buyers to pay higher, undiscounted month-to-month rates immediately upon expiration of an agreement.").

78. *Cf. id.* ¶ 55, at 4747 ("The decision to build or lease last-mile facilities generally occurs on a case-by-case basis when there is an interested potential customer. Whether to build a lateral connection can depend on a variety of factors, including the distance of a building to the competitive provider's existing network facilities, the density of business location near the targeted location—especially the number of nearby multiple tenant buildings, the potential return on investment given the customer's service demand (e.g., revenues tend to increase with the customer's bandwidth demands), the term of the agreement with the customer, access to rights-of-way, and the ability to access buildings, among other factors.").

79. *Id.* ¶ 104, at 4769 (footnote omitted).

and reducing their purchase commitments under the all-or-nothing plans.⁸⁰

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.⁸¹ However, in light of the factors described above, many customers have concluded that such a period would likely be far too short for them to switch to non-ILEC facilities at a significant number of locations.⁸²

Together, these factors—percentage commitments, all-or-nothing requirements, shortfall penalties, penalties for early termination, and others—explain why many ILEC customers have been unable to shift more than a modest portion of their requirements for special access service to alternative suppliers.⁸³ These customers can retain the flexibility to shift purchases to alternative suppliers, thereby subjecting ILECs to effective competition, only 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 forgo other contractual benefits, such as circuit portability.⁸⁴

C. HOW ILEC LOYALTY CONTRACTS CAN LEAD TO HIGHER SPECIAL ACCESS RATES

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

First, note that the demand curve faced by the ILEC is the market demand curve for special access minus the total quantity that other (“fringe”) suppliers would supply at each price. However, if the buyer must purchase a large share of its historic purchase volume from the ILEC in order to avoid a “tax,” the quantity that can be sold by the fringe at any price is

80. *Id.* ¶ 104, at 4769–70 (footnote omitted).

81. *See* Verizon, Ex Parte Letter in Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25 & RM-10593 at 4 (Mar. 26, 2015), <https://ecfsapi.fcc.gov/file/60001041478.pdf>.

82. *See, e.g.,* tw telecom inc., Ex Parte Letter in Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25 & RM-10593 at 7 (August 21, 2012), <https://ecfsapi.fcc.gov/file/7022007243.pdf>.

83. *Id.*

84. *See* Tariff Investigation Order, *supra* note 12, ¶ 149, at 4788.

reduced, so that the demand curve faced by the ILEC becomes less elastic. As a result, the ILEC is able to profitably raise its price.

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

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.⁸⁵

In this case, contracts that limit purchases from rival suppliers of special access in some geographic areas may limit their ability to expand into other areas by denying them the scale economies that they need to compete.

Finally, loyalty contracts may have longer-term effects. Rival suppliers of special access may not undertake current investments that would reduce their costs in the future, 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.⁸⁶

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 it to charge higher prices.⁸⁷ 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.⁸⁸ Because special access

85. Declaration of Professor Einer Elhauge on Behalf of Eisai Inc., *supra* note 49, ¶ 109, at 65.

86. *See id.* at 68–69.

87. *See id.* ¶ 111, at 66 (“[A] monopolist can get buyers to agree to be loyal for a nominal ‘discount’ from the price charged disloyal buyers, even though the result of all them agreeing is that they exclude the monopolist’s rivals and then pay higher prices than the but-for competitive price they would have paid.”).

88. *See id.* ¶ 114, at 67 (“[T]he foreclosure created by the loyalty contracts may prevent such rivals from expanding and achieving economies of scale. In

rivals are less able to compete, the ILEC is able to increase its rates.⁸⁹

III. MANY ILEC LOYALTY PROVISIONS DO NOT HAVE EFFICIENCY JUSTIFICATIONS

Many of the highly restrictive provisions that customers 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.⁹⁰ As explained above, many ILEC special access contracts effectively require the customer to continue to make purchases that are a very large percentage of its historic purchases from the ILEC in order to receive a discount from the month-to-month rates or to obtain other contractual benefits.⁹¹ 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.⁹² Alternatively, two 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.⁹³ 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

addition, excluding rivals who would never be equally efficient also can cause anticompetitive harm by reducing constraints on monopoly pricing.”).

89. *See id.* ¶ 111, at 66.

90. Tariff Investigation Order, *supra* note 12, ¶ 234, at 4829 (“The resulting higher downstream prices, therefore, offset any claimed efficiencies brought by the so-called lock-in requirements.”). Although penalties for early termination are not necessarily inefficient, the manner in which they are imposed by ILECs does raise efficiency concerns. *See id.* ¶¶ 234–36, at 4828–30. We discuss this issue in detail below when we consider possible remedies to encourage the competitive supply of special access.

91. *Cf.* Farrell Reply Declaration, *supra* note 35, ¶¶ 11–15 (“[I]n some circumstances a customer switching a part of its business to a non-ILEC provider could lose not only the discount on the portion switched, but also the MVP discount on the portion that remained with the ILEC.”).

92. Stanley M. Besen and Bridger M. Mitchell, Appendix A to Comments of BT Americas, et al. on Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25 & RM-10593, at 23–24 (Feb. 11, 2013).

93. *Id.*

circuits represent and thus to be unrelated to the amount of service purchased from other suppliers.⁹⁴

Moreover, the percentage purchase condition is often imposed on purchases in each of a number of widely dispersed geographic areas within an ILEC service territory.⁹⁵ In order to obtain a discount or other benefit in any area that the ILEC serves, an ILEC contract may require a customer to meet a percentage purchase condition that applies to the ILEC's entire territory, generally including areas in several states.⁹⁶ Thus, even if one geographic area within this territory were to experience robust competition, under the contract, a customer must purchase all or a very large proportion of its requirements in that area from the ILEC in order to obtain the discount on ILEC service in other areas in the territory where competition is less intense. It is highly unlikely 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 percentage of a customer's special access services that it provides in another area.⁹⁷ Such contracts are likely to discourage rivals from entering individual ILEC service areas even when they are more efficient suppliers and to discourage them from making investments that would eventually make them significant rivals throughout an ILEC's entire service area.

94. 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 *id.* But see Letter from Donna Epps, Vice President, Fed. Regulatory Affairs, Verizon, to Marlene H. Dortch, Sec'y, Fed. Comm'n's Comm'n 7 (Mar. 27, 2012).

95. See Letter from Donna Epps, *supra* note 94, at 11.

96. See Sprint Corporation, Ex Parte Letter, *supra* note 51 (arguing that the discounted rates offered as an alternative to the unaffordable month-to-month rates are supposedly reduced rates but are inflated, and that the ILECs attach anti-competitive contractual terms to the discounted rates such as these purchase conditions).

97. For example, AT&T's provision of special access circuits to a customer in Florida is highly unlikely to in any way affect the costs that AT&T incurs when providing special access circuits to the same customer in North Carolina, and vice versa. However, in order to receive circuit portability in either one of these states, the customer must commit to a volume commitment that applies throughout legacy BellSouth territory, which includes both of these states. See FED. COMM'NS COMM'N, BELL SOUTH TELECOMMUNICATIONS TARIFF, F.C.C. NO. 1 § 2.4.8(B) (2013)

The barrier to entry may be especially significant if the rival serves only a portion of the ILEC's service territory but the customer needs facilities in other parts of the territory as well. If the rival cannot serve the customer's requirements in *all* areas, loyalty contracts may prevent it from serving those requirements in *any* area and, even where entry is not completely foreclosed, the contract provisions can significantly limit the share of the requirements that the rival is able to serve.⁹⁸

Although the ILECs have claimed a number of efficiency justifications for the loyalty provisions in their special access contracts, the FCC has rejected many of these.⁹⁹ In addition, as we discuss below, we believe that economic efficiency requires that the penalties in ILEC special access contracts should be limited to customer-specific sunk *costs*, whereas the FCC argues that economically efficient penalties should be based on expected *revenues*.¹⁰⁰ Under the standard that we have proposed, the ILECs would have even more difficulty in justifying these penalties than under the one employed by the FCC.

IV. LOYALTY CONTRACT PROVISIONS IN OTHER MARKETS

Concerns about the competitive implications of loyalty contract provisions are not limited to the telecommunications market for special access services. For example, in the

98. See Tariff Investigation Order, *supra* note 12, ¶ 95, at 4764–65.

99. See, e.g., *id.* ¶ 99, at 4767 (“Neither Verizon nor AT&T, CenturyLink, and Frontier provided more detailed business justifications for their all-or-nothing requirements other than general business arguments that their terms and conditions are necessary to reduce cost or ensure predictability, certainty, or efficiency.”) (footnote omitted); *id.* ¶ 108, at 4771 (“Verizon has not established, nor have we found, a rationale that would support a finding that including that circuit in a portability plan would provide Verizon with increased certainty for that circuit. For the same reasons, we find the general assertions by AT&T, CenturyLink, and Frontier that such requirements are necessary to ensure predictability, certainty, or efficiency are insufficient to establish the reasonableness of the constraints these provisions impose on their customers”); *id.* ¶ 130, at 4780 (“The incumbent LECs have failed to provide any concrete cost or economic justification for [the shortfall] fees in response to our requirement that they provide for such support to justify the fees.”).

100. See *id.* ¶ 133, at 4781 (arguing that revenue-based penalties allow “economically efficient breach”).

microprocessor market, Advanced Micro Devices (“AMD”) brought suit against Intel accusing it, among other things, of using “discriminatory rebates, discounts and subsidies conditioned on customer ‘loyalty’ that have the practical and intended effect of creating exclusive or near-exclusive dealing arrangements”¹⁰¹ According to AMD, “Intel’s is a system of ‘penetration’ or ‘loyalty’ rebates designed to exclude AMD from a substantial portion of the market. Intel intentionally sets a rebate trigger at a level of purchases it knows to constitute a dominant percentage of a customer’s needs.”¹⁰² In the settlement of the case, which also involved the settlement of several other lawsuits, Intel agreed to pay AMD \$1.25 billion and agreed to a set of conditions, including that it would not offer customers inducements in exchange for purchasing all of their microprocessor needs from Intel.¹⁰³

In settling a complaint brought by the Federal Trade Commission, Transitions Optical, Inc., agreed, among other things, to stop “offering market share discounts that are based on what percentage of a customer’s photochromic lens sales are Transitions’ lenses.”¹⁰⁴ In a recently adjudicated case, Meritor claimed that Eaton’s practices, which included a provision under which a purchaser of truck transmissions “would only receive rebates if it purchased a specified percentage of its requirements from Eaton,” were anticompetitive.¹⁰⁵ The Court of Appeals for the Third Circuit concluded that “Plaintiffs presented sufficient evidence to support the jury’s finding that Eaton engaged in anticompetitive conduct and that Plaintiffs suffered antitrust injury as result.”¹⁰⁶

101. Complaint ¶ 35, *In re Intel Corp. Microprocessor Antitrust Litig.*, 258 F.R.D. 280 (D. Del. 2008), 2005 WL 1838069.

102. *Id.* ¶ 60. For a discussion of the case, see Joseph Farrell, Janis Pappalardo & Howard Shelanski, *Economics at the FTC: Mergers, Dominant-Firm Conduct, and Consumer Behavior*, 37 REV. INDUS. ORG. 263 (2010).

103. See Stephen Shankland, *Intel to Pay AMD \$1.25 Billion in Antitrust Settlement*, CNET, (Nov. 12, 2009, 11:17 AM), http://news.cnet.com/8301-1001_3-10396188-92.html.

104. Press Release, Fed. Trade Comm’n, FTC Bars Transitions Optical, Inc. from Using Anticompetitive Tactics to Maintain its Monopoly in Darkening Treatments for Eyeglass Lenses (Mar. 3, 2010), <http://www.ftc.gov/opa/2010/03/optical.shtm>.

105. *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 265 (3d Cir. 2012).

106. *Id.* at 303.

Finally, in the pulse oximetry market, Masimo challenged a number of Tyco's business practices. In upholding a lower court decision in favor of Masimo, the Court of Appeals for the Ninth Circuit found that "the district court properly determined that a reasonable jury, based on the evidence offered at trial, could have concluded Tyco's sole source and market share agreements violated the antitrust laws."¹⁰⁷

V. FCC ACTIONS REGARDING ILEC SPECIAL ACCESS SERVICE CONTRACTS

As noted above, in 2016, the FCC took actions that were intended to limit the use of loyalty provisions in ILEC special access contracts. It began its analysis by describing what it called "all-or-nothing" provisions in these contracts. It noted that these contracts

require customers to commit all their relevant in-service purchases, such as DS1 or DS3 channel terminations, to a single pricing plan, which limits the ability of customers to allocate their purchases across different plans. All-or-nothing requirements generally work in conjunction with circuit portability plans or options, which enable customers to avoid early termination fees when disconnecting individual circuits before their term commitments expire, provided they commit to maintaining a high percentage of their initial volume commitment over the duration of a plan. The fact that competitive LECs typically require portability for some significant portion of their purchases means that they usually must commit all their purchases to a portability plan regardless of their overall portability needs. Competitive LECs that make this choice are precluded from selecting tariff purchase options generally available to all customers. All-or-nothing requirements thus "lock up" all of a customer's purchases, limiting its ability to minimize the amount of its purchases subject to high percentage and longer term commitments and restricting its ability to migrate its purchases to alternative providers or to self-provision using its own facilities.¹⁰⁸

The FCC also found that

customers are unable to choose to keep their purchases out of the initial commitment associated with the portability plan by making a portion of their purchases on a month-to-month basis or through a term only plan or another generally available pricing plan. This limitation precludes customers from managing their business data services purchases in an economically efficient manner, restricting

107. Masimo Corp. v. Tyco Health Care Grp., L.P., 350 F. App'x 95, 97–98 (9th Cir. 2009).

108. Tariff Investigation Order, *supra* note 12, ¶ 95, at 4764–65 (footnote omitted).

how they purchase services from the incumbent LEC plans and restricting their ability to consider competitive alternatives. We determine that these tariff provisions are anti-competitive and unreasonable because they restrict a customer's purchase option without a corresponding reasonable business concern.¹⁰⁹

The FCC also addressed the reasonableness of "shortfall penalties"; costs that special access customers incur if they fail to purchase the amounts of services for which they had initially contracted.¹¹⁰ It found "the need to set a reasonable limit on shortfall fees Excessive penalties combined with high minimum purchase requirements harm competition by preventing competitive LECs from making cost-based choices about whether and when to transition their TDM purchases to Ethernet services, whether through purchases or construction."¹¹¹

The FCC found that shortfall penalties in some ILEC contracts are reasonable so long as they do not exceed the amount that a customer would have paid had it met its purchase commitment.¹¹² However, it also found that "[t]o the extent such fees impose costs on the customer beyond the provider's opportunity cost, such costs will unreasonably limit the customer's ability to make efficient choices and impede technology transitions."¹¹³

The FCC explicitly rejected a proposal by special access customers to limit these penalties to the "customer-specific sunk costs associated with providing a circuit."¹¹⁴ It observed, however, that

[s]ome commenters suggest that early termination fees could be calculated on the basis of costs instead of on revenue expectations. We note that this would be a rational approach to setting early termination fee levels that would likely yield lower fees, particularly given that the incumbent LECs have been able to charge for those facilities over a number of years and are also likely to have fully depreciated them on their books. The challenges of assigning costs in a customer specific fashion, however, make implementation of a cost-based methodology unrealistic.¹¹⁵

109. *Id.* ¶ 96, at 4765.

110. *Id.* ¶ 116, at 4773 (footnote omitted).

111. *Id.* ¶ 129, at 4780.

112. *Id.* ¶ 132, at 4781.

113. *Id.* ¶ 117, at 4773.

114. *Id.* at 4789 n.396. We discuss below why we challenge that conclusion.

115. *Id.* ¶ 157, at 4790 (footnotes omitted).

Nonetheless, the FCC also determined that “[a]ny incumbent LEC seeking to raise its early termination fees will be required to make a cost-based showing in support of any such filing . . . any such cost showing should account for costs savings that result from the early termination.”¹¹⁶

The FCC also found that some early termination penalties were unreasonable.¹¹⁷ Specifically, it found that, “[e]xcessive penalties combined with long term commitments harm competition by preventing competitive LECs from making efficient cost-based choices about whether and when to transition their TDM purchases to Ethernet services, whether through purchases or construction.”¹¹⁸

The FCC concluded that “a reasonable early termination fee should be set at a level no greater than the amount of revenue a customer would have paid had it met its minimum commitment.”¹¹⁹ However, it identified a number of cases in which these fees “exceed the incumbent LECs’ revenue expectations.”¹²⁰ The FCC then described “two methods of calculating a reasonable maximum early termination fee that would reflect expectation damages.”¹²¹ However, as it did in the case of shortfall penalties, it concluded that “[a]ny incumbent LEC seeking to raise its early termination fee will be required to make a cost-based showing in support of any such filing”¹²²

Although these regulations would have gone some way toward removing the anticompetitive effects of provisions in LEC special access contracts, in the following year the FCC withdrew them.¹²³ In her Dissent to the Commission’s Order, Commissioner Clyburn noted that

116. *Id.* ¶ 156, at 4789–90 (footnote omitted).

117. *Id.* ¶ 148, at 4787.

118. *Id.* (footnote omitted).

119. *Id.* ¶ 152, at 4788.

120. *Id.* ¶ 146, at 4787.

121. *Id.* ¶ 156, at 4789 (footnote omitted).

122. *Id.*

123. *Id.* ¶ 141, at 4784–85. The United States Court of Appeals for the Eighth Circuit recently rejected most of the challenges to the Commission’s Order. *Citizens Telecomm. Co. of Minn. v. Fed. Comm’n Comm’n*, 901 F.3d 991 (8th Cir. 2018). However, the Court did find that “[b]ecause the FCC did not propose completely ending *ex ante* regulation of transport services, it did not allow for informed participation by interested parties in that portion of the rulemaking, and its notice was insufficient” and, on that basis, the Court

[e]ven in non-competitive areas, the majority declines to take action against anticompetitive conditions in contracts and tariffs. These include all-or-nothing requirements, which preclude purchasers from selecting purchase options generally available in tariffs to all customers. Or, punitive shortfall and early termination penalties that exceed expectation damages which will lock up the market and force purchasers to stay in contracts. And finally, there are tying arrangements that require a purchaser to buy competitive services in conjunction with noncompetitive services. Particularly in an effectively deregulated nationwide market, these provisions could essentially be wielded to undermine nascent competition and to consolidate market power.¹²⁴

VI. CONTRACTUAL PENALTIES SHOULD BE BASED ON CUSTOMER-SPECIFIC SUNK COSTS

The efficiency justification for term commitments (and non-recurring charges) in special access contracts is the need for a carrier to recover its customer-specific sunk costs.¹²⁵ These are the costs of deploying those facilities that are used to serve a particular customer irrespective of the volume of service that it takes and that cannot be shifted to serve a different customer if the customer ceases taking the service.¹²⁶ Customer-specific sunk costs are thus distinguished both from costs that can be avoided if the quantity purchased by a customer is reduced and from costs for facilities that can potentially be used by a different customer if the customer ceases taking the service.¹²⁷

The FCC initially established ceilings for shortfall and early termination penalties based on ILEC expected revenues.¹²⁸ We take issue with its approach and instead propose that those penalties should be limited to recovery of customer-specific sunk costs.¹²⁹ Under this approach, an ILEC's one-time, nonrecurring charge for a special access circuit would be no higher than the customer-specific sunk costs of providing

vacated those portions of the final rule and remanded them to the FCC for further proceedings. *Id.* at 1005.

124. Business Data Services in an Internet Protocol Environment, 32 FCC Rcd. 3459, 3651 (Clyburn, Comm'r., dissenting).

125. Tariff Investigation Order, *supra* note 12, ¶¶ 99, 108, at 4767, 4771.

126. See Declaration of Besen & Mitchell, *supra* note 92, ¶ 56.

127. *Id.*

128. See Tariff Investigation Order, *supra* note 12, ¶¶ 153-54, at 4789.

129. Of course, we are even more critical of the Commission's decision to eliminate these ceilings altogether.

the circuit.¹³⁰ Similarly, under our approach, an ILEC's required term commitment for a special access circuit would have a duration no longer than is needed to recover the customer-specific sunk costs of providing the circuit, and a penalty for terminating a circuit prior to expiration of the term would be no higher than the amount of such costs that remain unrecovered at the time of termination.¹³¹ When a carrier incurs customer-specific sunk costs, it can legitimately expect to recover those costs during the duration of its contract with that customer,¹³² and we do not dispute Verizon's claim that it needs to "recover the costs associated with deploying facilities . . ." ¹³³ The relevant questions are the magnitude of those costs and the manner in which they are recovered.¹³⁴ Under our proposal, when such costs exist, instead of incurring higher recurring monthly payments, the customer should have the option of paying for them in the form of a non-recurring charge and no term requirement.¹³⁵ 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 in the non-recurring charge and there is no justification for imposing a minimum contract term or for imposing a charge if the customer fails to use the service for a minimum period of time.¹³⁶ Indeed, the FCC itself has noted that

no incumbent LEC has provided an explanation of or identified any costs it incurs when a customer fails to meet its percentage commitments that are greater than the costs it would incur in providing the service under terms of the tariff. We further find it likely that, consistent with the assertions of their competitive LEC customers, the providing incumbent LEC avoids certain costs when it does not provide a service.¹³⁷

130. Declaration of Besen & Mitchell, *supra* note 92, ¶ 55.

131. *Id.*

132. See Tariff Investigation Order, *supra* note 12, ¶¶ 99, 108, at 4767, 4771.

133. Declaration of Quinn Lew & Anthony Recine, Attachment B on Verizon Reply Comments on Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25 & RM-10593, at 12–13, para. 28 (Mar. 19, 2010).

134. Declaration of Besen & Mitchell, *supra* note 92, ¶ 57.

135. *Id.*

136. *Id.*

137. Tariff Investigation Order, *supra* note 12, ¶ 131, at 4781.

Whether a particular termination penalty provision is efficient will depend on the extent to which the ILEC incurs sunk costs to serve the specific customer.¹³⁸ Notably, the ILEC investments in the facilities that supply virtually all DS1 channel termination circuits have been sunk before an additional customer is served.¹³⁹ At most user locations, legacy ILEC special access facilities exist.¹⁴⁰ 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. ILECs could easily recover these costs in the form of non-recurring charges.¹⁴¹ In such cases, imposing significant early termination charges serves only to prevent customers from switching to an ILEC rival in the future and has no efficiency justification.¹⁴²

Even where the ILEC incurs substantial customer-specific sunk costs to provide a new customer circuit, without imposing very large termination penalties it could still protect against the risk of early termination by giving the customer the option of making either: (1) an up-front payment equal to those customer-specific sunk costs, or (2) recurring payments that amortize these costs provided 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, the payment cannot be used to discourage the customer from switching to a more efficient rival.

Customers that choose not 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 non-recurring 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

138. *Id.* ¶¶ 141–142, at 4784–85.

139. *Id.* ¶ 144, at 4785–86.

140. *Id.* ¶ 178, at 4800.

141. *Id.* ¶ 99, at 4767.

142. 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.

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 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 efficiency justification for a charge that exceeds the ILEC's customer-specific sunk costs, whether it is imposed on a non-recurring or a monthly basis.

Moreover, by separating ILEC cost recovery into customer-specific sunk costs and ongoing costs, it would be easier to determine whether the non-recurring charge that is being demanded is commensurate with a reasonable estimate of the sunk costs, something that is obscured in current contractual arrangements. 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."¹⁴³ If these costs are modest, the required term for a 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.¹⁴⁴ Tariffs that provide a large discount only for customers that accept a long contract term, are economically efficient only if customer-specific sunk costs are large.

In fact, 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 substantial.¹⁴⁵ Thus, unless the shortfall occurs very close to the expiration of the contract term, the penalty would almost certainly exceed the customer-specific sunk costs incurred by the carrier. The only possible purpose of this provision is to prevent a customer from shifting purchases to a rival during the term of its contract with the ILEC.

143. Declaration of Lew & Recine, *supra* note 133, ¶ 28.

144. A reasonable level for the non-recurring charge 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.

145. *E.g.*, Tariff Investigation Order, *supra* note 12, ¶ 118, at 4774 ("Shortfall penalties for the BellSouth [Area Commitment Plan] are computed monthly based on the shortfall (the difference between the customer's volume commitment and its actual purchases), multiplied by 50 percent of the Area Commitment Plan monthly recurring rate.") (footnote omitted).

Tying a customer's early termination penalty to the *revenues* that the ILEC would have received if the customer had completed its contract term is not efficient since those revenues may bear little or no relationship to the customer-specific sunk *costs* that the ILEC incurs in serving that customer.¹⁴⁶ To illustrate this point, consider an ILEC customer for which customer-specific sunk costs are 10 and which has a multi-year contract with the ILEC that, if completed, would generate revenues of 100. Now suppose that a rival is willing to sell the same service over the same period for 60. If the customer switches to the rival's service and if it must reimburse the ILEC only for its sunk costs, the customer realizes a benefit of $(100-60-10) = 30$, so it will benefit from a contract breach. Of course, the ILEC can prevent the breach by matching the rival's price.

Suppose, instead, that the customer must reimburse the ILEC for its lost revenues. In that case, the customer would save 40 by switching to the rival but it must pay the ILEC 100 as a penalty. Faced with this net loss of 60, it will not breach despite the fact that the rival may be a more efficient supplier. Contrary to the FCC's claim, a contract that requires the breaching party to pay more than customer specific sunk costs may discourage efficient breach.

VII. CONCLUSION

The terms and conditions in ILEC special access contracts provide especially graphic examples of the use of loyalty contracts by incumbent firms. These contracts contain a wide range of conditions, including minimum purchase requirements, long contract terms, and "all-or-nothing provisions" and, when these conditions are not met, they impose a wide range of "taxes" on purchases from rival suppliers, including both monetary payments and the loss of valuable benefits. Moreover, these conditions have few, if any, efficiency justifications and are imposed by firms with large market shares, so that they are especially likely to discourage entry by more efficient rivals. Moreover, even the recently

146. *But see id.* ¶ 133, at 4781 (arguing that revenue-based penalties allow "economically efficient breach."). We take issue with this claim from the FCC. Such penalties can be justified only if a commitment to serve one customer prevents the supplier from serving another, which will often not be the case.

eliminated FCC regulations that would have prohibited some of the terms of ILEC loyalty contracts would not have prevented contract conditions based on market shares or that imposed penalties based on ILEC expected revenues instead of customer-specific sunk costs. Especially with the complete elimination of these regulations, the terms and conditions in ILEC special access contracts will continue to impose barriers to entry by more efficient rivals.