locked storage following each administration." ²⁰ To make clear that this provision does not preclude the retention of digital copies, the May 2020 Interim Rule provided that copies also may be returned to "secure electronic storage." The new interim rule makes no change to that language.

This interim rule should not be seen as determinative of the final rule in this proceeding, which will be established on the basis of the overall rulemaking record. The Office recognizes, as it has previously, that the "specified centers" limitation was a concern for many test publishers even before the COVID-19 emergency, with several commenters to prior interim rules urging the Office to amend that language to facilitate a broader range of testing models.²¹ The Office therefore will continue to monitor the operation of the interim rule as it evaluates whether and under what conditions remote testing should be permitted under the final rule addressing secure tests.

In light of the end of the national COVID–19 emergency, and its positive experience with current secure test registration rules, the Copyright Office finds good cause to publish these amendments as an interim rule effective immediately, and without first publishing a notice of proposed rulemaking. The rule merely maintains the status quo and the expiration of the national emergency designation could otherwise create uncertainty related to the status of the procedures in the May 2020 Interim Rule.²²

III. Request for Comments

The Office invites comments regarding the continuation, modification, or possible expansion of the interim rule, particularly as it relates to online testing. The Office also invites comments on the desirability of eliminating in-person examinations and conducting only remote examinations of secure tests.

List of Subjects in 37 CFR Part 202

Claims, Copyright, Registration.

For the reasons set forth in the preamble, the Copyright Office amends 37 CFR part 202 as follows:

PART 202—PREREGISTRATION AND REGISTRATION OF CLAIMS TO COPYRIGHT

■ 1. The authority citation for part 202 continues to read as follows:

Authority: 17 U.S.C. 408(f), 702.

■ 2. Amend § 202.13 by revising paragraph (b)(1) to read as follows:

§ 202.13 Secure tests.

(1) A secure test is a nonmarketed test administered under supervision at specified centers on scheduled dates, all copies of which are accounted for and either destroyed or returned to restricted locked storage or secure electronic storage following each administration. A test otherwise meeting the requirements of this paragraph shall be considered a secure test if it was normally administered at specified centers prior to May 8, 2020, but is now being administered online, provided the test administrator employs measures to maintain the security and integrity of the test that it reasonably determines to be substantially equivalent to the security and integrity provided by inperson proctors.

Dated: May 11, 2023.

Shira Perlmutter,

Register of Copyrights and Director of the U.S. Copyright Office.

Approved by:

Carla D. Hayden,

 $Librarian\ of\ Congress.$

[FR Doc. 2023-11299 Filed 5-31-23; 8:45 am]

BILLING CODE 1410-30-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 51, 61, and 69

[WC Docket No. 18-155; FCC 23-31; FRS 138334]

Updating the Intercarrier Compensation Regime To Eliminate Access Arbitrage

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Federal Communications Commission (Commission) adopts rules to eliminate further exploitation of the access charge system by access-

stimulating entities, which ultimately causes IXCs and end-user customers to bear costs for services they don't use.

DATES: The amendments adopted in this document are effective July 3, 2023, except for the additions of § 51.914(d) and (g) at instruction number 3, which are delayed indefinitely. The Commission will publish a document announcing the effective date for § 51.914(d) and (g).

ADDRESSES: Federal Communications Commission, 45 L Street NE, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT:

Lynne Engledow, Wireline Competition Bureau, Pricing Policy Division via email at *Lynne.Engledow@fcc.gov* or via phone at (202) 418–1540. For additional information concerning the proposed Paperwork Reduction Act information collection requirements contained in this document, send an email to *PRA@fcc.gov* or contact Nicole Ongele at 202–418–2991.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Second Report and Order adopted on April 20, 2023, and released on April 21, 2023. A full-text copy of this document may be obtained at the following internet address: https://www.fcc.gov/document/fcc-adopts-rules-prevent-gaming-its-access-stimulation-rules.

Synopsis

1. For over a decade, the Commission has combated abuse of its access charge regime. Such regulatory arbitrage has taken several forms over the years, all of which center around the artificial inflation of the number of telephone calls for which long-distance carriers (interexchange carriers or IXCs) must pay tariffed access charges to the local telephone companies (local exchange carriers or LECs) that terminate the telephone calls to their end users. Some local telephone companies, often in areas of the country with high access charges, partner with high-volume calling service providers, such as "free" conference calling or chat line services, to inflate the number of calls terminating to the LEC and, in turn, inflate the amount of access charges the LEC can bill IXCs. This practice is inefficient because it often introduces unnecessary entities or charges into a call flow, perverts the intended purpose of access charges (i.e., to cover the LECs' cost of providing the service), and raises costs for IXCs, and ultimately their customers, whether they use the highvolume calling service or not.

2. Despite multiple orders and investigations making clear the Commission will not tolerate access

^{20 37} CFR 202.13(b)(1).

²¹ In response to the May 2020 Interim Rule, two commenters urged the Office to include remote testing in the definition of secure tests beyond the end of the pandemic. Association of Test Publishers Comments at 2 (June 8, 2020); National College Testing Association Comments at 3–6 (June 8, 2020).

²² H.R. Rep. No. 1980, 79th Cong., 2d Sess. 26 (1946). See 5 U.S.C. 553(b)(3)(B) (notice and comment is not necessary upon agency determination that it would be "impracticable, unnecessary, or contrary to the public interest"); id. at 553(d)(3) (30-day notice not required where agency finds good cause).

arbitrage, some providers continue to manipulate their call traffic or call flows in attempts to evade our rules. Recently, LECs have inserted Internet Protocol Enabled Service (IPES) Providers into call paths as part of an ongoing effort to evade our rules and to continue to engage in access stimulation. After inserting an IPES Provider into the call flow, the LEC then claims that it is not engaged in access stimulation as currently defined in our rules. The insertion of an additional provider (or providers) into the call flow is inefficient and is aimed at preserving the LEC's ability to charge IXCs terminating switched access charges on access-stimulation traffic—the very practice the Commission found unlawful in 2019.

3. Today, we take additional steps to deter arbitrage of our access charge system. In this Order, we adopt rule revisions to close perceived loopholes in our Access Stimulation Rules that are being exploited by opportunistic access-stimulating entities whose actions ultimately cause IXCs' end-user customers to continue to bear costs for services they do not use.

Background

- 4. The access charge regime was designed to compensate carriers for use of their networks by other carriers. Interexchange carriers are required to pay LECs for access to their networks, and in the case of calls to customers located in rural areas, IXCs historically had to pay particularly high access charges to rural LECs to terminate those calls. These higher access charges implicitly subsidized rural LECs' networks to help defray the higher costs those LECs incurred in serving less densely populated areas. In 1996, Congress directed the Commission to eliminate implicit subsidies—a process the Commission has pursued by establishing the Universal Service Fund and by steadily moving access charges to a bill-and-keep framework.
- Some LECs took advantage of technological advances to undermine the Commission's access charge regime by engaging in "access arbitrage." These LECs exploited high access charges in rural areas by artificially stimulating terminating "call volumes through arrangements with entities that offer high-volume calling services." The resulting high call volumes with no requirement that such LECs reduce their tariffed switched access rates "almost uniformly ma[d]e the LEC's interstate switched access rates unjust and unreasonable under section 201(b) of the Act."

- 6. In the 2011 *USF/ICC* Transformation Order, the Commission adopted rules to identify rate-of-return LECs and competitive LECs engaged in access stimulation and required that such LECs lower their tariffed access charges. The rules adopted in 2011 defined "Access Stimulation" as occurring when two conditions were satisfied: (1) a rate-of-return LEC or competitive LEC had entered into an access revenue sharing agreement that, "over the course of the agreement, would directly or indirectly result in a net payment to the other party"; and (2) one of two traffic triggers was met: either "an interstate terminating-tooriginating traffic ratio of at least 3:1 in a calendar month" or "more than a 100 percent growth in interstate originating and/or terminating switched access minutes of use in a month compared to the same month in the preceding year.' At the same time, the Commission began moving many terminating endoffice switched access charges to billand-keep.
- 7. Parties that wanted to continue to engage in access stimulation adapted to these rules by interposing Intermediate Access Providers, that arguably were not subject to the access stimulation rules adopted in 2011, into the call flow because many of these providers were still able to charge tariffed tandem switching and transport charges. Interexchange carriers still had to send traffic to LECs serving high-volume calling service providers and pay tariffed tandem switching and transport access charges, that were not transitioning to bill-and-keep, to the terminating LECs or the Intermediate Access Providers the LECs chose. As a result, IXCs and their customers were subsidizing the "free" services offered by high-volume calling service providers, whether IXC customers used those services or not.
- 8. In response to this ongoing arbitrage, the Commission adopted a Notice of Proposed Rulemaking on the subject. The record received in response to the Access Arbitrage Notice confirmed that access arbitrage continued even after adoption of the 2011 rules. Therefore, in 2019, the Commission adopted the Access Arbitrage Order, broadening the scope of its Access Stimulation Rules by adopting two additional definitions of 'Access Stimulation" unrelated to the existence of a revenue sharing agreement between parties. Competitive LECs with a terminating-to-originating traffic ratio of at least 6:1, absent a revenue-sharing agreement, and rate-ofreturn LECs with a terminating-tooriginating traffic ratio of at least 10:1,

- absent a revenue-sharing agreement, would be found to be engaged in access stimulation under the rules adopted in 2019. Most significantly, the Commission also found that requiring "IXCs to pay the tandem switching and tandem switched transport charges for access-stimulation traffic is an unjust and unreasonable practice" prohibited by section 201(b) of the Communications Act of 1934, as amended (the Act). The Commission addressed this unjust and unreasonable practice by adopting rules making access-stimulating LECs—rather than IXCs—financially responsible for the tandem switching and tandem switched transport service access charges associated with the delivery of traffic from an IXC to an access-stimulating LEC's end office or its equivalent. The Court of Appeals for the District of Columbia Circuit upheld the *Access* Arbitrage Order.
- 9. After the rules adopted in 2019 took effect, parties advised Commission staff that access stimulators had adopted new practices designed to evade the updated rules, primarily by inserting IPES Providers into the call flow. For example, some providers began "converting traditional CLEC telephone numbers to [IPES] numbers in order to claim that the 2019 [Access] Arbitrage Reform Order is not applicable" to the resulting traffic because the calls were bound for telephone numbers obtained by IPES Providers, rather than to LECs serving end users, as required by our rules. LECs and IPES Providers may obtain telephone numbers directly from numbering authorities, indirectly from a LEC partner, or indirectly via a commercial or leasing arrangement. All companies receiving telephone numbers directly from numbering administrators are assigned a unique Operating Company Number (OCN) that identifies the provider associated with each telephone number.
- 10. In a 2021 enforcement order against competitive LEC Wide Voice, LLC (Wide Voice), we found that Wide Voice "inserted a VoIP [(Voice over Internet Protocol)] provider into the call path for the sole purpose of avoiding the financial obligations that accompany the Commission's access stimulation rules." Then, in July 2022, we adopted a Further Notice of Proposed Rulemaking seeking comment on proposals to prevent companies from leveraging perceived ambiguities in our rules to continue to engage in access arbitrage. In the Further Notice, we sought comment on sample call flows and proposed several definitions relevant to our Access Stimulation Rules, as well as rule revisions making clear "that an

Intermediate Access Provider shall not charge an IXC tariffed charges for terminating switched access tandem switching and switched access tandem transport for traffic bound to an IPES Provider whose traffic exceeds the [access-stimulation] ratios in §§ 61.3(bbb)(1)(i) or 61.3(bbb)(1)(ii) of our Access Stimulation Rules."

11. The following diagrams, which were also included in the *Further Notice*, illustrate sample call flows. Diagram 1 represents a call flow that includes both a LEC and an IPES Provider between an Intermediate Access Provider and an end user that is

a high-volume calling service provider. Diagram 2 provides an example of a call where the LEC has been removed from the call flow and there is only an IPES Provider between the Intermediate Access Provider and the high-volume calling service provider that is the enduser recipient of the call.

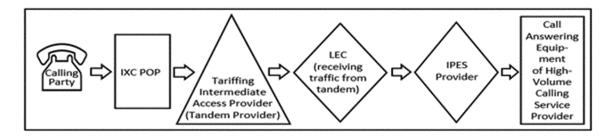


Diagram 1: Showing a hypothetical call path including a LEC and an IPES Provider—to facilitate discussion throughout the

remainder of this Order. "POP" refers to point of presence.

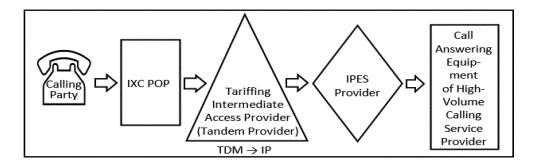


Diagram 2: Showing a hypothetical call path where the Intermediate Access Provider sends traffic directly to the IPES Provider—to facilitate discussion throughout the remainder of this Order. "TDM (time division multiplexing) to IP" refers to a transition that occurs during the transfer of a telephone call between the technologies used by the entities involved in the call flow.

12. In response to the Further Notice, we received widespread support for further action to stem access arbitrage. USTelecom confirms that, after the reforms adopted in the 2019 Access Arbitrage Order became effective, entities manipulated their business models to continue charging IXCs terminating tandem switching and transport access charges for calls delivered to access stimulators. USTelecom suggests that the "primary difference between the new scheme and the old scheme is not the concept, but the regulatory classification of the entities in the call stream, purposely inserted by arbitrageurs to claim these arrangements are beyond the Commission's reach." Verizon agrees that "access stimulation has not

materially decreased, only changed form." AT&T explains that its longdistance network now terminates approximately 400 million minutes of use (MOU) to IPES Providers per month, which is "essentially twice" the MOU it terminated to IPES Providers prior to the 2019 Access Arbitrage Order. Thus, the record strongly suggests that instead of ceasing access-stimulation activityor taking responsibility for paying certain access charges, as required by our Access Stimulation Rules-some providers chose to exploit a perceived loophole in those rules. Commenters also suggested several revisions to the proposed rule language to further strengthen our Access Stimulation Rules and prevent ongoing arbitrage.

Discussion

13. We are compelled to act again to fight regulatory arbitrage of the Commission's access charge regime. In this Order, we eliminate any perceived ambiguity in our Access Stimulation Rules that results in parties attempting to circumvent those rules simply by inserting IPES Providers into the call

path. This practice directly contravenes the Commission's orders, policies, and Access Stimulation Rules. We adopt narrow and focused changes to our rules that are designed to prevent entities from evading responsibility for their access-stimulation activity. The rules and revisions strike an appropriate balance between addressing harmful access-stimulation conduct on the part of certain entities and avoiding negative effects on providers that are not engaged in such activity. We find these rule revisions will serve the public interest by reducing carriers' incentives and ability to send traffic over the Public Switched Telephone Network (PSTN) for the purpose of collecting inflated, tariffed terminating tandem switching and transport access charges from IXCs, thereby artificially increasing costs to IXCs and harming their end-user customers.

A. Limiting the Imposition of Access Charges When IPES Providers Are Engaged in Access Stimulation

14. We find significant support in the record for our proposal to prohibit

Intermediate Access Providers from charging IXCs tariffed terminating tandem switching and transport access charges for traffic bound for IPES Providers engaged in access stimulation as defined in § 61.3(bbb) of our rules. Therefore, we adopt rules providing that, when traffic is delivered to an IPES Provider by a LEC or an Intermediate Access Provider and the terminating-tooriginating traffic ratios of the IPES Provider meet or exceed the triggers in the existing Access Stimulation Rules, the IPES Provider will be deemed to be engaged in access stimulation. In this case, "any entity that provides terminating switched access tandem switching or terminating switched access tandem transport services between the final Interexchange Carrier in a call path and" an access stimulator is considered an Intermediate Access Provider and shall not impose tariffed terminating tandem switching and transport access charges on IXCs sending traffic to the IPES Provider or the IPES Provider's end-user customer. The Intermediate Access Provider may seek compensation from the IPES Provider for charges the Intermediate Access Provider cannot bill to IXCs. The IPES Provider, if it chooses, may seek reimbursement for these access charges from its end-user customer(s).

15. Commenters widely agree with our proposal to use the same terminating-to-originating traffic ratio triggers for IPES Providers that we currently use for LECs. Thus, we apply to IPES Providers the 3:1 terminating-tooriginating traffic ratio plus revenuesharing agreement trigger in § 61.3(bbb)(1)(i), and the 6:1 terminating-to-originating traffic ratio trigger, absent a revenue-sharing agreement, in § 61.3(bbb)(1)(ii). We find no need, based on the record, to reconsider the existence of revenuesharing arrangements between parties in the context of our rules. At the same time, we do not apply to IPES Providers the 10:1 terminating-to-originating traffic ratio applicable to rate-of-return carriers. IPES Providers' rates are not subject to rate-of-return regulation and no commenters suggested that their network configurations or call flows are in any way similar to rate-of-return regulated LECs' networks or call flows. No commenter suggested applying the 10:1 ratio to IPES Providers, and no information in the record justifies expanding the applicability of the 10:1 ratio in such a manner.

16. We reject Teliax's unsupported assertion that price-cap incumbent LECs should be subject to the same traffic ratio reporting requirements as competitive LECs, rate-of-return LECs,

and IPES Providers. The Commission has previously explained that "complaints regarding access stimulation activities have not directly involved price cap carriers." The record in this proceeding provides no evidence that this has changed. Nor is there any evidence that supports Teliax's assertion that any price-cap LECs are engaged in access stimulation. Even if Teliax's proposal had merit, it is beyond the scope of this current rulemaking as we did not seek comment on expanding our Access Stimulation Rules to encompass price-cap LECs. For these reasons, we lack any basis for expanding our Access Stimulation Rules as Teliax

proposed.

17. According to HD Carrier, an IXC or its wireless affiliate has an incentive to send traffic over TDM, and then assert that it does not need to pay access charges by claiming a provider later in the call path is engaged in access stimulation. HD Carrier provides no support for its claims, however. To the contrary, HD Carrier's arguments rely on several incorrect assumptions which we correct here: (a) IXCs cannot unilaterally enter in to interconnection agreements and for that reason, they may still have to use the tariffed, TDM path to terminate traffic; (b) the terminating carrier, not the originating carrier, dictates the call path possibilities at the terminating end of the call, and any Intermediate Access Providers, through call routing instructions detailed in the LERG Routing Guide (LERG); and (c) not all wireless companies have IXC

18. The record confirms that the rules we adopt serve the public interest because they are essential to deterring access stimulation. These new rules, similar to those adopted in the Access Arbitrage Order, will prohibit Intermediate Access Providers and LECs from requiring IXCs to pay tandem switching and tandem transport charges for access-stimulation traffic that the Commission has found to be unjust and unreasonable in violation of section 201(b) of the Act. Under the rules we adopt, an IPES Provider will be responsible for calculating its traffic ratios at each end office or end office equivalent and providing the required notifications of access-stimulation activity to the Commission and affected entities. These rules are consistent with other public interest requirements imposed on VoIP providers, such as universal service, E911, and other reporting obligations.

19. Some commenters ask us to go a step further, and not only apply the access-stimulation triggers and notification requirements to IPES

Providers, but also impose on IPES Providers the same financial responsibility for access-stimulation traffic as LECs have under the current rules. Bandwidth, for example, proposes that, "[r]ather than stating an IPES Provider 'may' pay for terminating switched access tandem switching and terminating switched access tandem transport services where the IPES Provider is engaged in access stimulation, the rule should require the IPES Provider . . . to assume financial responsibility for the services."

20. Although our Access Stimulation Rules require access-stimulating LECs to assume financial responsibility for tandem services used to deliver accessstimulation traffic, as proposed in the Further Notice, we decline to impose the same mandatory condition on access-stimulating IPES Providers. Instead, the IPES Provider "may" assume financial responsibility. We do, however, make clear that IXCs shall not be billed by Intermediate Access Providers for terminating tandem and transport charges to deliver traffic to an IPES Provider engaged in access stimulation. Under the rules we adopt here, an Intermediate Access Provider will have an option and may seek compensation from an accessstimulating IPES Provider, or it shall seek compensation from the IPES Provider's LEC partner (if that LEC had directly assigned numbers that it transferred to the IPES Provider that then used those numbers to receive access-stimulated traffic) for the tariffed terminating tandem switching and transport access charges related to traffic bound for an IPES Provider engaged in access stimulation. In short, Intermediate Access Providers, LECs, and IPES Providers may determine their own billing arrangements among themselves when an IPES Provider is engaged in access stimulation but tariffed terminating switched access charges may not be imposed on IXCs in those situations. We find that this approach recognizes the difference in regulatory treatment between LECs and IPES Providers while also advancing our goal of curbing access stimulation. And under this approach, if access is being stimulated and an IXC is unlawfully charged for tariffed terminating tandem switching or transport, the IXC may file a complaint against the LEC if the stimulated traffic is being sent to numbers that were directly assigned to the LEC, or it may bring a court action against the IPES Provider if the stimulated traffic is being sent to numbers that were directly assigned to the IPES Provider.

21. In addition, we decline Bandwidth's request to expand the Access Stimulation Rules to "require [a]ccess [s]timulators to pay any tariffed charges associated with stimulated originating and terminating traffic." Bandwidth suggests that its proposal would prevent access-stimulating entities from charging any originating access charges and would make them, instead of IXCs, financially responsible for all tandem service chargesincluding dedicated tandem charges for both terminating and originating traffic heading to or from access stimulators and argues that not incorporating its proposal would create a loophole in our Access Stimulation Rules.

22. As AT&T acknowledges, however, we did not seek comment on expanding the current Access Stimulation Rules to encompass originating traffic or dedicated tandem service charges. Although Bandwidth correctly points out that the *Further Notice* included certain questions regarding originating 8YY traffic, we only asked about "issues regarding the treatment of originating 8YY traffic for purposes of calculating the traffic ratios related to the triggers in our Access Stimulation Rules." Those questions were focused on whether we needed to refine the existing methodology for calculating traffic ratios used to determine whether an entity is engaged in terminating access stimulation. They were not designed to elicit comments about potential reforms to our originating access or 8YY access charge rules, and we thus lack a full record on which to consider such reforms. Indeed, any changes to our rules governing originating traffic would have far-reaching implications that are best addressed in other docketed proceedings, such as the 8YY Access Charge Reform and Intercarrier Compensation reform dockets.

23. Bandwidth and AT&T also raised concerns about the potential practice of carriers imposing additional, improper access charges on IXCs to make up for tandem switching and switched access transport revenue which terminating carriers lost as a result of the rules adopted in the Access Arbitrage Order and the 8YY Access Charge Reform Order. To the extent there are any concerns that providers may be imposing charges for terminating switched access tandem switching or terminating switched access transport services that are precluded by our Access Stimulation Rules, we find that our existing rules adequately address that issue. The definition of "tandemswitched transport and tandem charge" in § 69.111 of our rules includes charges

for the following services: tandem switched transport facility, common transport multiplexing, tandem switched transport termination, and tandem switching. Thus, pursuant to our Access Stimulation Rules, Intermediate Access Providers and LECs are not permitted to charge IXCs tariffed rates for any of those four rate elements or services, if the LEC (under either the current rules or the new and revised rules) or the IPES Provider (under the new and revised rules) is engaged in access stimulation. Our rules apply to access-stimulating entities that provide tariffed services with rate elements that are equivalent to those described here, even if they are offered under different names. We will scrutinize any tariff modifications filed by LECs or Intermediate Access Providers that improperly attempt to shift recovery of precluded terminating switched access tandem switching or terminating switched access transport costs to other charges in a provider's tariff. We will also be vigilant in looking for any attempts carriers may make to impose tariffed charges for functions they do not actually perform.

24. Definition of "End Office Equivalent." We adopt our proposal that IPES Providers be required to calculate their traffic ratios in each end office or equivalent at which they receive traffic for purposes of determining whether they meet or exceed the traffic ratios in our Access Stimulation Rules. Contrary to claims in the record, this is consistent with how the Access Stimulation Rules have been applied. First, however, we dispel concerns in the record that IPES Providers may attempt to evade responsibility for calculating their traffic ratios by claiming their traffic should not be counted because it does not transit an "end office or equivalent," as the present rules require.

25. To make clear how providers' traffic ratio calculations should be made, we adopt two new rules. We add a definition of "End Office Equivalent" to our rules to ensure that our Access Stimulation Rules are specifically applicable to IPES Providers that do not have a traditional "end office," as well as to LECs that do have an "end office." We also adopt a rule that clarifies the methodology that IPES Providers and other providers are required to use in calculating their access-stimulation traffic ratios.

26. The term "end office" is already defined in our rules and is a common term used to mean "the telephone company office from which the end user receives exchange service." We now adopt a new term, "End Office Equivalent," as § 61.3(fff), solely for

purposes of our Access Stimulation Rules, which is defined as follows:

End Office Equivalent. For purposes of this part and §§ 51.914, 69.3(e)(12)(iv), and 69.4(l) of this chapter, an End Office Equivalent is the geographic location where traffic is delivered to an IPES Provider for delivery to an end user. This location shall be used as the terminating location for purposes of calculating terminating-to-originating traffic ratios, as provided in this section. For purposes of the Access Stimulation Rules, the term "equivalent" in the phrase "end office or equivalent" means End Office Equivalent.

27. AT&T expresses concern that arbitrageurs might "claim[] that certain IP terminating arrangements do not transit an end office 'equivalent' at all." In response, Bandwidth argues that IPES Providers with authority to receive direct numbering assignments do, in fact, have an end office equivalent in which they can determine their terminating-to-originating traffic ratios for purposes of our Access Stimulation Rules. The new definition we adopt requires a geographic location. In addition, as Bandwidth suggests, a possible geographic location for an "End Office Equivalent" applicable to IPES Providers could be a switch POI (point of interconnection) CLLI (Common Language Location Identifier). Bandwidth explains that both an end office and switch POI CLLI are associated with a geographic rate center making the switch POI CLLI the equivalent of an end office. We do not specify that an IPES Provider must use a switch POI CLLI as the geographic location of termination for the calculation of traffic ratios, but the definition of "End Office Equivalent" we adopt acknowledges that every IPES Provider has one or more End Office Equivalent locations and that each one shall be used as a terminating location for purposes of calculating traffic ratios under our Access Stimulation Rules. Therefore, the definition of "End Office Equivalent" makes clear that, for purposes of our Access Stimulation Rules, the definition of "Access Stimulation" in § 61.3(bbb) unquestionably applies to IPES Providers.

28. Calculating Traffic Ratios. We also adopt a rule that incorporates our proposal that IPES Providers be required to calculate their terminating-to-originating traffic ratios and provides the methodology for how such traffic ratios should be calculated for purposes of our Access Stimulation Rules. Most commenters agree that the IPES Provider is in the best position to calculate its own traffic ratios, because it "necessarily has visibility into its own

access traffic," is "the entity that chooses how it will send or receive its traffic," and tracks its calls for billing purposes. Accordingly, we decline to adopt our alternative proposal that would have required Intermediate Access Providers to calculate IPES Providers' traffic ratios. We agree with commenters that such a requirement would unduly burden Intermediate Access Providers and is unworkable because Intermediate Access Providers do not possess the information needed to compute the relevant traffic ratios. We find that requiring IPES Providers to count their own traffic for purposes of the access-stimulation triggers is necessary to thwart the latest efforts to evade our Access Stimulation Rules by inserting IPES Providers into the call flow. As a result of the actions we take today, entities will no longer be able to "claim that the [Access Arbitrage Order] is inapplicable because the traffic is bound for telephone numbers obtained by IPES Providers and not bound for LECs serving end users.

29. At the same time, in response to concerns raised in the comments, it is important for us to provide a clear methodology of how IPES Providers and LECs should calculate their terminatingto-originating traffic ratios. Otherwise, there may be confusion that could lead to the miscalculation of traffic ratios, disputes between providers, or potential new arbitrage opportunities. Above we detail where traffic should be calculated (for LECs at each of their end offices, and for IPES Providers at each of their "End Office Equivalents") for purposes of our Access Stimulation Rules. Here we detail how a LEC or IPES Provider must calculate its traffic ratios; that is, based on MOU to and from telephone numbers directly assigned to that LEC or IPES Provider, respectively. Presently, certain commenters explain, when an Intermediate Access Provider delivers traffic to an IPES Provider (for delivery to telephone numbers leased or bought by the IPES Provider from a LEC that then indirectly assigns those numbers to the IPES Provider), those calls are still counted in the LEC's traffic ratios because LECs calculate their ratios on traffic to and from telephone numbers directly assigned to their OCNs, including when a LEC provides those telephone numbers to another entity via indirect assignment.

30. Given the ongoing attempts by some entities to misapply or exploit perceived loopholes in our current Access Stimulation Rules and concerns expressed in the record, we agree that we must specify how carriers calculate their traffic ratios for purposes of our Access Stimulation Rules. Accordingly,

we adopt a new rule, consistent with how LECs in the industry already count traffic, for compliance with our Access Stimulation Rules, requiring each competitive LEC, rate-of-return LEC, or IPES Provider to include in its terminating-to-originating traffic ratio, to be counted separately at each end office or End Office Equivalent, all traffic "going to and from any telephone number associated with an Operating Company Number that has been issued" to such LEC or IPES Provider. Under this rule, IPES Providers will be required to include in their traffic ratios all calls made to and from telephone numbers they receive directly from a numbering administrator, but not calls made to and from telephone numbers obtained indirectly from a LEC.

31. Similarly, in the case where one LEC supplies another LEC with telephone numbers (indirectly assigning numbers to the second LEC), the first LEC that was directly assigned the telephone numbers by a numbering administrator is required to calculate its ratios by counting the calls to and from those directly assigned telephone numbers, even though that first LEC has assigned those telephone numbers to a second LEC. The clarity this rule provides will prevent confusion and potential double-counting of callsby the LEC that was assigned the numbers directly and again by the IPES Provider, or LEC, that received those numbers indirectly from a LEC.

32. We also reject other methods for calculating traffic, particularly by state, specific end user, or Intermediate Access Provider, or some other manner, instead of at the end office or End Office Equivalent. There was some discussion in the record about calculating traffic ratios at the state level. Calculating traffic ratios at the state level would make traffic manipulation easier—a result or potential loophole we do not want to allow. Several other parties suggested alternative ways to calculate traffic, such as at the network or aggregate level. None of these parties provided sufficient support for these suggestions, however, and we find these proposals would allow for even easier traffic manipulation contrary to our goal of deterring access stimulation. For example, if traffic were counted in the aggregate, as some parties suggest, access-stimulating LECs or IPES Providers could send terminating traffic to one or a few end offices, or End Office Equivalents, of an unrelated LEC or IPES Provider such that the original LEC's or IPES Provider's ratios over the totality of their network, would not meet or exceed the traffic ratio triggers in the rules, meaning IXCs would have

to pay for all terminating access charges even though if the traffic had not been shifted the traffic ratio triggers would have been met. Under our new rules, traffic ratio calculations must be made at each end office or End Office Equivalent for telephone numbers directly assigned to the provider's OCN. As under the current rules applicable to LECs, if an IPES Provider is deemed to be engaged in access stimulation because it meets or exceeds the traffic ratio triggers in an End Office Equivalent, then it must comply with the Access Stimulation Rules and IXCs would not be charged for terminating tandem switching or transport. This takes into account the possibility that entities have more than one end office or End Office Equivalent and will discourage traffic manipulation, whether between end offices or End Office Equivalents of the same provider, or between different companies' end offices or End Office Equivalents, to stay under the traffic ratio triggers.

33. We find that the methodology we adopt—calculating a provider's traffic ratios at each end office or End Office Equivalent based on calls to and from telephone numbers assigned to that provider's OCN—provides a simple-toadminister, bright-line test that eliminates confusion in determining which entity is responsible for counting traffic and will deter potential future access-stimulation arbitrage. Counting traffic based on which entity is assigned a particular telephone number not only identifies the responsible entity, it also ensures that all calls are accounted for in calculating the access-stimulation traffic ratios and that no calls are double-counted. In addition, even though the networks of IPES Providers and LECs may route traffic differently, the common denominator of our methodology is that providers have a bright-line test for calculating ratios on the basis of calls routed to and from telephone numbers associated with an end office or equivalent and an OCN that identifies that provider.

34. We conclude that the benefits of this methodology overcome any potential risks it may pose to a LEC that sells or leases telephone numbers to IPES Providers or to other LECs. It is true that, under new § 61.3(bbb)(5), a LEC, for example, is held responsible if it has directly assigned numbers that it then indirectly assigns to an IPES Provider that uses those telephone numbers it receives from that LEC to stimulate traffic, even though the LEC may have limited visibility into, or control over, the IPES Provider's traffic flow. The relationship by which a LEC indirectly assigns numbers to an IPES

Provider, however, is a business arrangement that the parties enter into voluntarily. As such, each party can contractually protect itself from the possibility that one of them may engage in access stimulation and can, for example, require that each party hold the other harmless from any financial responsibility for such activities and expressly provide that such numbers will not be used to violate our Access Stimulation Rules. Under the new rule we adopt today, LECs "would have a strong incentive to take corrective steps to avoid being deemed an access stimulator—up to and including ending the relationship with the stimulating customer." Indeed, competitive LECs took such steps to terminate their agreements with providers shortly after the Commission adopted rules in 2019 to make access-stimulating LECs, rather than IXCs, financially responsible for tandem switching and transport service access charges in the delivery of traffic.

35. In cases where an IPES Provider obtains telephone numbers from a LEC, the LEC that indirectly assigns numbers to the IPES Provider will include calls to those numbers in the LEC's own ratio calculations. Thus, IXCs can easily ascertain from LERG databases, available to the public, which telephone numbers are assigned to which provider (the LEC or the IPES Provider) to evaluate the traffic ratios based on the OCN associated with any particular group of telephone numbers. Otherwise, as Inteliquent explains, IXCs:

will have no visibility into the identity of this provider or providers because the associated traffic will not be assigned to the provider(s) OCNs in the LERG. Without a public record demonstrating which phone numbers belong to the provider, the interexchange carrier[s] will have no visibility as to their inbound or outbound traffic, meaning that there will be no independent or objective way to evaluate the traffic ratios of the party using numbers supplied to it by a LEC.

Without the use of public databases, it would be easier for a LEC, possibly one that is presently deemed an access stimulator under the current rules, to evade responsibility for stimulated traffic by claiming the traffic is the responsibility of the other provider.

36. To conclude, our new rule 61.3(bbb)(5) makes explicit that a competitive LEC, rate-of-return LEC, or an IPES Provider is required to calculate its traffic ratios on calls that traverse its end office or End Office Equivalent and go to and from telephone numbers directly assigned to that provider's OCN. And if that LEC or IPES Provider meets or exceeds the relevant traffic ratio trigger, then an IXC shall not be

charged terminating access charges for the delivery of that traffic. Thus, the addition of this rule will minimize providers' ability to skirt responsibility for access stimulation.

37. Notification Requirements. We next amend our rules to require that an IPES Provider notify Intermediate Access Providers, IXCs, and the Commission if it is engaged in access stimulation as defined in our revised rules, similar to the obligations that already apply to LECs. An IPES Provider engaged in access stimulation as defined in § 61.3(bbb)(1)(i) and (ii) of our rules shall satisfy its notice and reporting requirement to the Commission by filing a record of its access-stimulating status in WC Docket No. 18–155 on the same day that it issues such notice to affected IXCs and Intermediate Access Providers. We find that these requirements are necessary to enable Intermediate Access Providers to determine whether they can lawfully charge IXCs tariffed rates for interstate and intrastate terminating tandem services in connection with calls terminating to, or through, an IPES Provider, and to help IXCs determine if the charges are appropriate.

38. We disagree with Bandwidth's proposal to change the present notice and reporting requirements. Bandwidth suggests that a "more prominent, public disclosure" is necessary, and that the Commission should publish public filings in its Daily Digest to "provide all IXCs (and consumers) with notice of where access stimulation occurs." The Commission has already established a disclosure requirement that is both well understood by the industry and available to the public through the Commission's Electronic Comment Filing System. There is no indication that the present filing procedure is insufficient for providing effective notice of access-stimulation activity to all affected or interested parties.

39. We take seriously concerns that IXCs may be using improper self-help to withhold payment for services they have obtained pursuant to tariffs. We caution IXCs against improperly using our rules to engage in the wrongful withholding of payments. We continue to discourage providers from engaging in self-help except to the extent that such self-help is consistent with the Act, our rules, and applicable tariffs. Moreover, we would expect and encourage any IXC with evidence of unlawful conduct on the part of a LEC or Intermediate Access Provider to bring a complaint proceeding under section 208 of the Act for damages to deter such conduct in the future.

40. We decline to adopt Verizon's proposal that we add a rule defining the

financial liability of an IPES Provider that engages in access stimulation but fails to provide timely notice of that activity to affected parties. Verizon requests that we amend § 51.914 of our rules "to make clear that, where an IPES [P]rovider does not timely self-identify and the Commission or a court later holds that the IPES [P]rovider should have self-identified . . . the obligation to bear tandem switching and transport charges applies retroactively to when the IPES [P]rovider should have selfidentified" and that the IPES Provider "must then reimburse long-distance carriers for any amounts improperly billed." We find that such a rule is unnecessary to achieve its intended

purpose.

41. Under the rules we adopt today, an IPES Provider that meets or exceeds the access-stimulation triggers but fails to provide the proper notice would violate our rules. If a LEC or an IPES Provider is engaged in access stimulation and fails to notify the Intermediate Access Provider or IXC, for whatever reason, an IXC's recourse is against the LEC or IPES Provider, not the Intermediate Access Provider. Our rules and the Act permit an IXC to bring proceedings before the Commission or the courts and recover full damages, including any retroactive damages, if the IXC is improperly billed by another carrier. Complaints involving IPES Providers, which are not common carriers, may be brought in the courts for adjudication.

42. The determination of liability and the award of specific damages involving access-stimulation traffic is a factintensive inquiry requiring analysis of the functions of multiple carriers in transmitting, and billing for, calls in a particular call path. Thus, the Commission or a court, in an adjudicatory proceeding, is best suited to determine issues of liability and damages, including whether, based on the facts at hand, "the obligation to bear tandem switching and transport charges applies retroactively to when the IPES [P]rovider should have self-identified." Indeed, Verizon's proposed rule could have the unintended effect of inappropriately pre-judging liability and damages.

43. When an IPES Provider Is No Longer Engaged in Access Stimulation. We received no comments regarding our proposal that IPES Providers conform to the same requirements as LECs for determining when an IPES Provider that was engaged in access stimulation is no longer deemed to be engaged in access stimulation. Thus, we adopt our proposal to extend those same requirements to IPES Providers.

Accordingly, if an IPES Provider has an access charge revenue-sharing agreement and is engaged in access stimulation because it meets or exceeds the 3:1 interstate terminating-tooriginating traffic ratio at an end office or equivalent in a calendar month, as described in § 61.3(bbb)(1)(i) of our rules, it would no longer be deemed to be engaged in access stimulation if it terminates all revenue sharing agreements and its traffic ratio is below 6:1. In the case of an IPES Provider that has no revenue-sharing agreement and is engaged in access stimulation because it meets or exceeds the 6:1 traffic ratio established by § 61.3(bbb)(1)(ii) of our rules, it would no longer be deemed to be engaged in access stimulation if its traffic ratio falls below 6:1 for six consecutive months, similar to the current rule applicable to competitive LECs. Additionally, once an IPES Provider terminates its engagement in access stimulation, it would be required to notify the Commission and any affected Intermediate Access Providers and IXCs of its changed status, similar to the current rule applicable to LECs.

44. Implementation and Effective Dates. In the Further Notice, we proposed that providers should be required to comply with the new and revised rules adopted in this Order within 45 days following their effective date. This is the same timeframe that the Commission found to be reasonable when it adopted the current Access Stimulation Rules. We asked parties if this timeframe posed any challenges or difficulties. We did not receive any comments in response and have no reason to believe this timeframe is insufficient, as there have been no complaints about this timeframe since it was first adopted for the existing rules. Thus, we give providers 45 days to come into compliance with our new and revised rules once they become effective. The effective date of the rules that do not require Paperwork Reduction Act (PRA) review is 30 days after publication in the Federal **Register**. Several of the rules we adopt may require Office of Management and Budget (OMB) review pursuant to the PRA. A separate notice will be published in the Federal Register detailing the effective dates and compliance dates for those rules.

- B. Declining To Adopt Commenters' Proposals That Are Unnecessary or Insufficiently Supported
- 45. Commenters submitted several additional proposals not addressed in the *Further Notice* that, for the reasons discussed below, we decline to adopt. We find that these proposals are

duplicative of our existing processes, lack sufficient support in the record to allow us to adopt them, or have already been rejected by the Commission.

46. Formally Establish a Rebuttable Presumption and an Access-Stimulation Specific Complaint Process. We received several comments requesting clarification of, or changes to, our current informal and formal complaint processes targeted to access stimulation. Because these suggestions do not materially differ from our current enforcement processes, and are moot with regard to IPES Providers because our § 208 complaint process does not apply to IPES Providers, we reject them as duplicative and unnecessary.

47. Several commenters request that we make clear that the rebuttable presumption process outlined in the USF/ICC Transformation Order applies to IPES Providers. These commenters explain that IXCs lack access to access stimulators' (and their partners') traffic and call routing information. Therefore, these commenters argue that a complaining carrier should be permitted to rely on its own internal data to show that an IPES Provider's traffic with the complaining carrier meets or exceeds the access-stimulation triggers, shifting the burden to the IPES Provider or its LEC partner to rebut the presumption with its own traffic data. These parties propose that if the LEC or IPES Provider is unable to rebut this presumption, or chooses not to provide data, then Intermediate Access Providers or LECs could not charge IXCs for terminating tandem switching and transport service for the delivery of traffic to that LEC or IPES Provider.

48. We confirm that IXCs remain able to initiate a complaint with the Commission by using their traffic data to assert that a LEC is engaged in access stimulation, with the burden then shifting to the LEC to use its traffic data to confirm or refute the IXC's allegations, and that this process will remain in place after this Order takes effect. A complaining IXC may rely on its own data, for example data calculated at a LEC or IPES Provider's company-wide level, about the traffic it exchanges as the basis for filing a complaint or a court action. Lumen and USTelecom provide examples of information that may be used to support (for example, traffic ratio data calculated at the company-wide level rather than in an end office or equivalent) or rebut (for example, showing that traffic associated with certain telephone numbers should be attributed to an IPES Provider rather than the LEC) a claim of access stimulation. We do not dictate the type or amount of information that

may be effective to support or rebut an IXC's claim of access stimulation and acknowledge that a court will manage any complaints presented before it as it deems appropriate. The LEC (or IPES Provider) would then have the burden of showing that it is not engaged in access stimulation by providing the necessary traffic data rebutting the IXC's allegation. We rely on the industry to self-police this issue, and we find that our current complaint processes or appropriate court proceedings have been effective in addressing violations of our Access Stimulation Rules. We also expect that the rule we adopt today detailing how LECs and IPES Providers are to calculate their traffic ratios will, by use of publicly available information, provide greater transparency into entities' traffic ratios which will help resolve disputes about whether an entity is engaged in access stimulation. To the extent commenters request that our enforcement process be extended to IPES Providers, IPES Providers are not subject to complaints made pursuant to section 208 of the Act because IPES Providers are not common carriers under Title II of the Act. We therefore must decline proposals to extend our enforcement process to IPES Providers.

49. Verizon offers a similar proposal for streamlining the process for bringing access-stimulation complaints, calling for us to establish a new "hybrid informal-formal" complaint process "to lower the [transaction] costs" for identifying access stimulators. Verizon proposes that we modify our complaint processes to allow an IXC to initiate a complaint by presenting sufficient evidence that an alleged access stimulator (LEC or IPES Provider) meets or exceeds the traffic ratios in our rules. Unlike the current enforcement rules, Verizon proposes that the primary burden of producing data would be on the entity alleged to be engaged in access stimulation, and that an alleged access stimulator could meet that burden by, for example, submitting to the Commission its complete switched access call detail records. Under this proposal, the responding LEC or IPES Provider would also be required to provide "a certification that the records are complete and accurate." Then the Commission could conduct an independent evaluation of the traffic data. According to Verizon, the Commission's evaluation would enable the filing of a formal complaint if the alleged access stimulator refuses to selfidentify as an access stimulator regardless of what the call detail records indicate.

50. We decline to adopt Verizon's proposal to create a new "hybrid"

process to adjudicate an IXC's claims of access stimulation. Verizon's proposal does not differ appreciably from our already-established informal and formal complaint processes as applied to Title II carriers. For example, as AT&T acknowledges, our rules currently require written responses to informal complaints. Although Verizon proposes mandating that parties certify that their records are complete and accurate, our rules already require parties to respond to discovery requests fully in writing under oath or affirmation. Likewise, Verizon's proposal that discovery be subjected to an "independent evaluation" is currently required by section 208(a) of the Act, which confirms that it is "the duty of the Commission to investigate the matters complained of in such manner and by such means as it shall deem proper.' Thus, we find that Verizon's proposal is already substantially captured by our current enforcement rules and processes. For these reasons, we reject proposals that we create a special process to resolve access-stimulation complaints.

51. No Direct Connection Mandate or § 61.26(f) Clarification. We next reject Lumen's proposal that we "should mandate that VoIP provider applicants for direct access [to numbers] certify that their CLEC partners will allow IXCs to have direct connection in terminating switched access routing." Aureon opposes this proposal, noting that it is outside the scope of this proceeding, and that the Commission has already considered and rejected Lumen's proposal. It also explains that Lumen's proposal would be ineffective, and cautions that direct connections would result in access stimulators moving their traffic, leading to stranded costs for LECs and IXCs.

52. We also reject Lumen's request that we clarify the applicability of § 61.26(f) of our rules, which addresses the rates a competitive LEC may charge for switched exchange access services, because, according to Lumen, there is a "lack of uniformity in the industry when it comes to the billing capability afforded" by that rule. Lumen suggests that this issue is directly within the scope of the Further Notice. AT&T argues that such a clarification would be contrary to the Commission's goal of transitioning to bill-and-keep by expanding "situations in which access charges could be billed."

53. Lumen's proposals are outside the scope of this proceeding, and we therefore decline to consider them here. We emphasize, however, that the Commission has previously rejected suggestions to mandate direct

connections, and note that Lumen has not provided good reason for us to reconsider that decision. Likewise, any requirement for direct connection would be counter to the Commission's long-standing policy that parties determine their best means of interconnection. Furthermore, we disagree with Lumen's suggestion that § 61.26(f) of our rules is unclear or needs modification. Even if we agreed with Lumen, we find that its arguments are better addressed in our existing proceeding on direct access to numbers, not in the context of addressing the access stimulation of terminating switched tandem and transport charges, and we note that Lumen has already made similar arguments in the Direct Access to Numbers proceeding.

54. HD Carrier suggests that we "provide an 'access-stimulating' IPES the option to offer to connect directly in IP on a bill-and-keep basis to the originating service provider to avoid the shifting of financial responsibility that may otherwise occur under [the Commission's Access Stimulation Rules] if the IPES exceeded certain traffic ratios." Wide Voice agrees that we have "other tools at [our] disposal, such as IP reciprocal, bill and keep interconnection arrangements to stomp out the so-called abuse of access charges." As discussed here, the Commission has not, and we do not now, mandate how entities interconnect for the exchange of traffic—in IP or TDM. If parties wish to enter into contractual agreements for the exchange of traffic using IP technology at mutually beneficial terms, perhaps billand-keep, they have been, and remain, free to do that; i.e., they have the "option" to do so. No action we take in this Order affects that ability. Consistent with precedent, we expressly limit the requirements of IPES Providers, adopted in this Order, to measures targeted to address the arbitrage of terminating tandem switching and transport switched access charges.

55. We Do Not Require IPES Providers with Direct Access to Numbers to Certify They Will Not Use Numbering Resources to Evade or Violate Our Access Stimulation Rules. We reject proposals that we require IPES Providers with direct access to numbers to certify annually that they will not use numbering resources to evade the Access Stimulation Rules. We have already sought comment on this issue in our Direct Access to Numbers proceeding. The Direct Access to Numbers docket is a separate proceeding with a separate record. To make a decision on this proposal here would introduce confusion and

unnecessarily complicate the Direct Access to Numbers proceeding. Additionally, we received a more comprehensive record on the certification proposal in the Direct Access to Numbers proceeding where related questions were asked and discussed. We therefore decline to adopt an annual certification requirement here and leave any final decision on that issue for the Direct Access to Numbers proceeding.

56. Proposals for Which the Commission Has Already Provided a Decision. In its comments, Inteliquent describes an arbitrage practice whereby calls routed to a LEC or an IPES Provider are blocked or otherwise rejected when transmitted via a regulated path to the high-volume calling service provider served by the terminating LEC or IPES Provider. Inteliquent claims that when the calls are rerouted through unregulated providers, they are completed. Inteliquent asks that we address this issue by clarifying that "traffic will be attributed to the [traffic ratios of the] terminating IPES Provider or LEC whenever an IXC attempts to deliver that traffic over the path specified by the IPES Provider/LEC in the LERG, but the call is rejected over that path," so the IPES Provider/LEC is not able "to escape designation as an access stimulating provider" by diverting some traffic over an unregulated path. We decline to act as Inteliquent requests because traffic traversing the nonregulated path is outside the scope of our Access Stimulation Rules, which are tied to tariffed services. Also, the Commission has already explicitly explained that, in the case of traffic destined for an access-stimulating LEC, an IXC or Intermediate Access Provider may consider its call completion duties satisfied once it has delivered the call to the tandem. For similar reasons, such a limitation on the scope of call completion duties would be reasonable to apply to traffic destined for an accessstimulating IPES Provider in the calling scenario Inteliquent describes.

57. Teliax questions whether "[a] ratio alone could prove to be overly inclusive by encompassing LECs that had realized access traffic growth through general economic development—as well as changes in technology and markets." On the other hand, AT&T and Verizon express concerns that because the traffic ratio triggers are bright-line rules, then "traditionally those 'triggers are necessarily under-inclusive.'" We have seen no evidence in the industry that our ratios are not working as intended, nor, as discussed, is there evidence in the record to support establishing

different traffic ratios to apply to IPES Providers than those in the existing rules. Indeed, the Commission purposely decided to err on the side of caution and adopted conservative triggers in an effort to avoid the chance that a company might be wrongly identified as engaging in accessstimulation activity. Further, as is already the case with LECs, if an IPES Provider, "not engaged in arbitrage, finds that its traffic will meet or exceed a prescribed terminating-to-originating traffic ratio," the provider may request a waiver and demonstrate special circumstances that warrant a deviation from our rules. The traffic ratios in § 61.3(bbb) of our rules are the brightline tests the Commission has established for determining when an entity is engaged in access stimulation and for enforcing our rules to prevent it. We do not expect our rules to capture any entities that are not actively engaged in access stimulation. But we do expect that the rules adopted today will capture additional entities engaged in access stimulation, strengthen our existing rules, close perceived loopholes, and enhance the overall enforceability of our Access Stimulation

C. Adopting Additional Rule Revisions

1. Definition of "IPES Provider"

58. To implement the rules adopted in this Order, we add a definition of "IPES Provider" in § 61.3(eee) that applies only in the context of the Access Stimulation Rules. In the *Further Notice*, we proposed a definition of "IPES Provider" based on the existing definition of "Interconnected VoIP service" in our rules, but we make changes to that proposed definition, based on comments we received in the record.

59. First, we remove the proposed requirement that an IPES Provider support real-time, "two-way voice" communications. We sought comment on USTelecom's proposal to remove "two-way voice" from the definition of "IPES Provider" in the *Further Notice*, and several commenters supported this modification, arguing that the definition should be broader. For example, Verizon discusses a "call-to-listen" service, whereby a user can make a long-distance telephone call to listen to a radio station. Verizon explains that a ''call-to-listen'' service uses only a simplex channel—"one that sends voice communications in one direction (to the listener)." Verizon argues that such services should be covered by our Access Stimulation Rules, but is concerned that they may not be

considered "two-way voice communications." We do not need to determine whether a "call-to-listen" service, or other similar services mentioned in the comments, are twoway services, or one-way services. We agree, however, that we should not limit the definition of "IPES Provider" to encompass only entities that provide two-way voice services. Instead, we eliminate the phrase "two-way voice" from our final rule to avoid any ambiguity and close what could have been a potential loophole in our definition of "IPES Provider." No commenter objected to the removal of "two-way voice."

60. Second, we eliminate language in the proposed "IPES Provider" definition referring to "real-time" communications. In the Further Notice. we asked whether the proposed definition of "IPES Provider" would "capture all providers that could be used to try to circumvent the Access Stimulation Rules." One commenter suggested the deletion of the requirement for the provision of "realtime communications." We are concerned that arbitrageurs could develop services that do not provide 'real time" communications in an effort to evade our Access Stimulation Rules. Like our decision to delete the phrase "two-way voice" from the definition of "IPES Provider," the elimination of the term "real-time" will also help advance our goal of eliminating arbitrage of our access charge regime. Furthermore, similar to our decision to eliminate the "two-way voice" phrase, we need not determine whether a service provides "real-time" communications. By deleting the term "real-time" from the definition of "IPES Provider," we eliminate another potential loophole in the proposed rules by capturing more providers that may try to circumvent the Access Stimulation Rules. No commenter opposed the elimination of the term "real-time." With this change, and the above change to eliminate the phrase "two-way voice," the phrase 'enables real-time two-way voice communications" in the proposed definition of "IPES Provider" is changed to simply "enables communications" in the final definition we adopt in this

61. Third, we define "IPES Provider" to include those entities that receive terminating traffic, regardless of whether they also originate traffic. In the proposed definition of "IPES Provider," the requirement to originate traffic was given in the following text: "a provider offering a service that . . . permits users . . . to terminate calls to the public switched telephone network

or . . . terminate to an internet Protocol service or an internet Protocol application." Commenters objected to the proposed definitional language arguing that the inclusion of such language could create potential loopholes in our Access Stimulation Rules. For example, commenters asserted that if we required an IPES Provider to both originate and terminate traffic, an arbitrageur could separate terminating and originating traffic, and provide just terminating services and claim that it was not subject to the Access Stimulation Rules because it did not also originate traffic. We agree. Accordingly, we eliminate the text in the proposed definition of "IPES Provider" in our Access Stimulation Rules that would have applied those rules only to providers that transmit both originating and terminating traffic; no commenters requested that we require IPES Providers to originate traffic. Additionally, because our definition of "IPES Provider" applies to § 51.914 of our rules, we do not adopt proposed $\S 51.903(q)$. The sole purpose of proposed § 51.903(q) was to define "IPES Provider" for § 51.914, but that definition is not needed because § 51.914 now references the definition of IPES Provider in § 61.3(eee). No commenters addressed proposed § 51.903(q).

62. Finally, both Bandwidth and Inteliquent suggest that the definition of "IPES Provider" should include a requirement that the IPES Provider acquire the telephone numbers it uses directly from a numbering administrator. Bandwidth argues that this would provide a clear definition and "capture more potential access stimulators in the marketplace." Alternatively, Bandwidth proposes that we modify either the Access Stimulation definition or the IPES Provider definition in our rules to account for possible "wholesale IPES Providers." We find that Bandwidth's concerns are better addressed by our rule governing the calculation of traffic ratios, rather than in the definition of "IPES Provider." In our new rule governing the calculation of traffic ratios for purposes of our Access Stimulation Rules, we require LECs and IPES Providers to include in their ratio calculations all traffic going through their end office or equivalent to and from any telephone number associated with an Operating Company Number issued to that LEC or IPES Provider (that is, numbers directly assigned to that LEC or IPES Provider).

2. Definition of "Intermediate Access Provider"

63. As proposed in the Further Notice, we amend the definition of "Intermediate Access Provider" in § 61.3(ccc) of our rules to include IPES Providers as entities that may receive traffic from an Intermediate Access Provider, and to specify the type of service being provided by the Intermediate Access Provider. One commenter supported, and no commenters opposed, the proposed addition of IPES Providers to the definition of "Intermediate Access Provider." As discussed below, we incorporate minor edits to the definition that we proposed in the Further Notice.

64. We make a total of four changes to our definition of "Intermediate Access Provider" in § 61.3(ccc). First, as proposed in the Further Notice, we amend § 61.3(ccc) to specify two additional types of entities that may receive traffic from the final IXC in the call path. The amendment we adopt adds the phrase "IPES Provider" to § 61.3(ccc) in two circumstances: (a) where a LEC delivers traffic to an IPES Provider engaged in access stimulation; and (b) where an Intermediate Access Provider delivers calls directly to an IPES Provider engaged in access stimulation. Second, as proposed in the Further Notice (with one exception), we modify the phrase "any entity that carries or processes traffic at any point between the final Interexchange Carrier . . ." in current § 61.3(ccc) to specify the access service being provided, as follows: "any entity that provides terminating switched access tandem switching or terminating switched access tandem transport services between the final Interexchange Carrier" This change makes § 61.3(ccc) clearer and more consistent with our other Access Stimulation Rules, such as revised § 69.4(1).

65. Third, we amend the list of sections to which the revised definition of "Intermediate Access Provider" applies. Currently, the definition begins with: "[t]he term means, for purposes of this part and §§ 69.3(e)(12)(iv) and 69.5(b) of this chapter." We now add §§ 51.914 and 69.4(l) to this list, because they also reference "Intermediate Access Provider." We remove the reference to § 69.3(e)(12)(iv), because that section does not reference "Intermediate Access Provider." Thus, the revised definition of "Intermediate Access Provider" begins with "[t]he term means, for purposes of §§ 51.914, 69.4(l), and 69.5(b) of this chapter." Although we did not specifically propose this amendment in the Further

Notice, we did seek comment on conforming edits and non-substantive edits to our rules. These edits to § 61.3(ccc) are conforming or non-substantive edits made to ensure consistency in our Access Stimulation Rules. Finally, we change the reference to "Intermediate Access Provider" in the last clause of § 61.3(ccc) in the proposed definition in the Further Notice to "the entity," so that the definition is not self-referential. We consider this edit also to be a conforming or non-substantive edit.

66. Bandwidth suggests that we go further and broaden the definition of "Intermediate Access Provider" to include the possibility that there may be more than one Intermediate Access Provider in a call flow, and to prohibit all Intermediate Access Providers in the call flow from imposing any tariffed access charges when the LEC (or, with the other rule revisions adopted today, the IPES Provider) is engaged in access stimulation. We find that we do not need to broaden the definition as Bandwidth suggests, but we take this opportunity to emphasize that the definition of "Intermediate Access Provider" in § 61.3(ccc) of our rules includes any entity "that provides terminating switched access tandem switching or terminating switched access tandem transport services between the final Interexchange Carrier in a call path" and the LEC or IPES Provider, as discussed above. The reference to "any entity" was in § 61.3(ccc) prior to the revisions adopted today. Section 61.3(ccc), read in combination with §§ 51.914, 69.4(1), and 69.5(b), prohibits IXCs from being charged for terminating tandem switching or tandem transport charges provided by *any entity* that meets the definition of "Intermediate Access Provider" in the call flow. The definition is broad enough to include more than one entity as an Intermediate Access Provider in a call flow. Thus, the rule addresses the concerns raised by Bandwidth.

67. Bandwidth also suggests not including references to terminating switched access tandem switching or terminating switched access tandem transport services in the proposed definition of "Intermediate Access Provider," and elsewhere in our Access Stimulation Rules, and replacing it with the more general term "tariffed access services." Bandwidth argues that these changes are necessary to ensure that Intermediate Access Providers do not improperly impose additional tariffed charges to make up for access charge revenue they may lose as a result of our Access Stimulation Rules. As described

above, § 69.111 of our rules, which defines "tandem-switched transport and termination charge," specifies the four rate elements or services that will become the financial responsibility of an access-stimulating LEC or IPES Provider and addresses Bandwidth's concerns. Accordingly, we find no reason to make the additional rule changes Bandwidth proposes to address this issue.

68. Bandwidth also seems to suggest that we should expand the definition of "Intermediate Access Provider" to include Intermediate Access Providers on the originating side of the telephone call by adding the phrase "or the first Interexchange carrier in an originating call path" to the "Intermediate Access Provider" definition. We decline to consider the changes Bandwidth proposes, as they are outside the scope of this proceeding. This proceeding is focused on addressing arbitrage of terminating access charges. The service providers and charges involved in the arbitrage of originating access have been addressed in a separate Commission proceeding.

69. Finally, we reject Bandwidth's suggestion that we eliminate proposed § 61.3(ccc)(2) from the "Intermediate Access Provider" definition. Bandwidth provides no explanation for this change. The call path provided in the rule that Bandwidth seeks to remove corresponds to many situations described in the record where a LEC is located in the call path between an Intermediate Access Provider and an access-stimulating IPES Provider. We retain such call paths in the Intermediate Access Provider definition to ensure that the definition applies to entities in such call paths.

3. Calculating Traffic Ratios at the "End Office or Equivalent" and the Requirement That an Access Stimulator Serve End Users

70. End Office or Equivalent. As proposed in the Further Notice, we amend many of our Access Stimulation Rules to apply to traffic ratios counted at the "end office or equivalent." As discussed above, we also add a definition of "End Office Equivalent" to ensure that our Access Stimulation Rules are also specifically applicable to IPES Providers.

71. Some commenters would prefer that we remove the phrase "end office or equivalent" wherever that phrase currently appears in our Access Stimulation Rules. These commenters assert that the phrase "end office or equivalent" complicates the calculation of traffic ratios. None of these commenters provide any examples or explanations of how our amendments

would complicate the relevant calculations, nor do they explain what alternative location should be used for purposes of calculating traffic ratios, if not at each "end office or equivalent." Indeed, the commenters do not explain where the calculations are made now.

Commenters also assert that the phrase "end office or equivalent" could create new potential loopholes in our rules. AT&T, USTelecom, and NCTA posit that arbitrageurs could shift traffic between end offices to keep from meeting or exceeding the traffic ratio triggers in the Access Stimulation Rules. But these commenters do not show whether carriers allegedly engaged in access stimulation have more than one end office (or an equivalent location, in the case of IPES Providers) to move traffic between, or if they are moving traffic to another entity, or if there is some other traffic manipulation.

73. In sum, we include the phrase "end office or equivalent" in new § 51.914(c) and add it to § 61.3(bbb)(1)(i)(B), (bbb)(1)(ii) and (iii), and (bbb)(2) and (3) for consistency, to make the rules applicable to both LECs and IPES Providers equally, and to clearly designate where the traffic ratio calculations shall be made. We add the definition of "End Office Equivalent" as new § 61.3(fff) to avoid any ambiguity about the meaning of the word "equivalent" in the phrase "end office or equivalent," as that phrase is used in our Access Stimulation Rules.

74. Serving End User(s). As proposed in the Further Notice, we retain the phrase "serving end user(s)" in the rule defining when a LEC, and now an IPES Provider, engages in Access Stimulation. We also add the phrase "serving end user(s)" to the rules defining when a LEC and, now, an IPES Provider will be deemed to continue to be engaging in Access Stimulation. Although AT&T expresses concern that this language may hinder enforcement of our Access Stimulation Rules, AT&T did not provide any explanation supporting these concerns, and acknowledged that "[i]f IPES Providers are brought directly within the [Access Stimulation Rules, then this language may in theory become less problematic." The other rule revisions we make today bring IPES Providers within our Access Stimulation Rules.

75. We also decline to adopt AT&T's proposed language to define the meaning of "serving end users" on which we sought comment in the *Further Notice*. AT&T had proposed that we define a LEC to be "serving end users" when "it provides service to a called or calling party, either directly or through arrangements with one or more

VoIP providers or other entities that serve called or calling parties," except if the LEC is an Intermediate Access Provider. Bandwidth suggested edits to AT&T's proposed rule language, but also acknowledged that "bringing IPES [P]roviders with direct numbering resources within the scope of the [Access Stimulation Rules] may make the 'serving end users' language unnecessary." AT&T also acknowledged that the inclusion of the phrase "serving end user(s)" in our Access Stimulation Rules indicates that it is not appropriate to calculate ratios of "originating-toterminating traffic for a LEC or IPES entity that includes aggregated originating traffic placed by end users not served by the LEC or IPES [P]rovider." This practical result would deter arbitrage and provides another reason to retain and add, where appropriate, the phrase "serving end user(s)" to our Access Stimulation Rules. No other commenters specifically addressed our proposed uses of the phrase "serving end user(s)." We find that the changes to our rules will allow for greater consistency in the Access Stimulation Rules. We also find that AT&T's and Bandwidth's proposed revisions are rendered moot by the other reforms we adopt in this Order. Accordingly, we adopt the proposed modifications and reject other proposals to define our use of the term "serving end user(s)."

4. Interstate/Intrastate Language

76. As proposed in the Further Notice, we amend §§ 51.914(a)(1), 69.4(l), and 69.5(b)(1) and (2) of our rules to include the phrase "interstate or intrastate" to reflect language in the Access Arbitrage Order making clear that the rules adopted in that Order apply to the charges for both interstate and intrastate access services. We also include the phrase "interstate or intrastate" in new § 51.914(e) (which is the new designation for current § 51.914(c), because other sections have been added above it). No commenter objected to these proposed changes.

77. În the Access Arbitrage Order, the Commission made clear that the rules it was adopting to combat access stimulation were intended to prohibit providers of tandem switching and transport from billing IXCs for interstate and intrastate terminating switched access tandem switching or terminating switched access tandem transport, for traffic bound for access-stimulating LECs. The Commission explained that applying the rules "equally to interstate and intrastate traffic will discourage gamesmanship related to the geographic classification of the traffic; i.e., carriers

creating ways to move accessstimulation schemes to intrastate service." The reference to intrastate traffic was not reflected in the text of the rules, however. As proposed in the Further Notice, we now amend §§ 51.914(a)(1), 69.4(l), and 69.5(b)(1) and (2) of our rules to make clear that competitive LECs, rate-of-return LECs, and Intermediate Access Providers shall not charge IXCs for interstate or intrastate terminating switched access tandem switching and terminating switched access tandem transport when the terminating traffic is destined for a competitive LEC, rate-of-return LEC, or IPES Provider engaged in access stimulation, as defined in § 61.3(bbb) of our rules.

78. We reject, however, Bandwidth's suggestion that we add the term "intrastate" to the definition of "Access Stimulation" in § 61.3(bbb) of our rules or delete references to "interstate" throughout that section. Bandwidth briefly comments that this will make the section "consistent with [the] proposal [in the Further Notice] that [the] rules address intrastate access." We disagree. Bandwidth's proposed changes would result in providers having to include both interstate and intrastate traffic in calculating their ratios of terminating traffic to originating traffic. That is not consistent with our intent in this Order or with the Commission's actions in the Access Arbitrage Order. Bandwidth is correct that we proposed rule amendments reflecting language in the Access Arbitrage Order indicating that when a LEC or IPES Provider is engaged in access stimulation, the IXC shall not be charged interstate or intrastate terminating switched access tandem switching and terminating switched access tandem transport charges. That is different, however, than requiring that both intrastate and interstate traffic be included in the traffic ratio calculations described in §61.3(bbb) of our rules. Not only is Bandwidth's proposal contrary to the language in the Access Arbitrage Order and Further Notice, but Bandwidth does not provide any justification for us to adopt this significant change to our Access Stimulation Rules. We therefore reject Bandwidth's proposed modifications to § 61.3(bbb) of our Access Stimulation Rules.

5. Conforming Edits to Our Rules

79. We amend §§ 51.914(a)(2) and (b)(2), 69.4(l), and 69.5(b)(1) and (2) of our rules to eliminate inconsistencies among sections of the Access Stimulation Rules that are meant to be consistent. We received no comment opposing these proposed rule revisions

and therefore adopt the rules as proposed. New § 51.914(c)(1) and (d)(2) are consistent with our amendments to § 51.914(a)(2).

80. We amend § 51.914(a)(2) of our rules to remove any ambiguity about its mandatory requirement. The unrevised § 51.914(a)(2) requires that an accessstimulating LEC shall designate, "if needed," the Intermediate Access Provider that will provide certain terminating access services to the LEC. This designation applies in cases where an Intermediate Access Provider is different from the end office LEC. However, the current wording may lead to a misconception that a LEC may subjectively decide on its own when this designation is needed. Therefore, as we proposed in the Further Notice, we change the phrase "if needed" to "if any." We similarly use the phrase "if any" in new § 51.914(c)(1) and (d)(2) which apply to an access-stimulating IPES Provider and its designation of an Intermediate Access Provider. We received no comment about ensuring that new § 51.914(c)(1) and (d)(2) conform with the proposed edit to $\S 51.914(a)(2)$, and we adopt the rule language as proposed. We also amend § 51.914(b)(2) by adding the phrase "if any" and similarly require the designation of an Intermediate Access Provider "if any" that will provide service to an access-stimulating LEC. This addition is a conforming edit intended to ensure consistency in our Access Stimulation Rules.

81. We amend current § 51.914(d), which applies when traffic is bound for a LEC engaged in access stimulation, to also apply when traffic is bound for an IPES Provider engaged in access stimulation, consistent with our intent to conform our Access Stimulation Rules to apply equally to IPES Providers, as well as to LECs, and redesignate the section as 51.914(f). We do not add the phrase "or receives traffic from an Intermediate Access Provider destined for an IPES Provider engaged in Access Stimulation," as we proposed in the Further Notice, because we find it redundant and unnecessary. We received no comments addressing specific terms in this proposed rule. The rule is now § 51.914(f), because other rules were added that precede it.

82. We amend § 69.4(1) of our rules to ensure that the requirement to not bill certain carriers is mandatory. Section 69.4(1) currently requires that a LEC engaged in access stimulation "may not bill" IXCs terminating switched access tandem switching or terminating switched access tandem transport charges for access-stimulation traffic. However, in the *Access Arbitrage Order*,

the Commission made clear that it is unlawful for a LEC engaged in access stimulation to charge an IXC terminating switched access tandem switching or terminating switched access tandem transport charges. As we proposed in the *Further Notice*, we change the phrase "may not bill" to "shall not bill," in § 69.4(1) to eliminate any ambiguity that a LEC engaged in access stimulation "shall not bill" IXCs terminating switched access tandem switching or terminating switched access tandem transport charges for access-stimulation traffic.

83. We also make consistent where appropriate in the Access Stimulation Rules the references to "terminating switched access tandem switching or terminating switched access transport" services. Currently, some of the Access Stimulation Rules refer to "terminating switched access tandem switching or terminating switched access transport," and some refer to "terminating switched access tandem switching and terminating switched access transport." This primarily is an inadvertent error which results in an inconsistency in the rules that may be exploited by entities engaged in access stimulation or that want to engage in access stimulation. For example, with the use of the "and" in § 51.914(b)(2), we are concerned that a LEC engaged in access stimulation may claim that it does not use an Intermediate Access Provider that provides both tandem switching and transport, and argue that it, therefore, does not need to provide the notifications required in § 51.914(b)(2). Such an outcome would be contrary to our rules and policies against arbitrage. We have indicated our intention to remove potential loopholes in our Access Stimulation Rules, reduce opportunities for arbitrage, and minimize unintended consequences. In furtherance of those goals, we change "terminating switched access tandem switching and terminating switched access transport" to "terminating switched access tandem switching or terminating switched access transport" in § 51.914(a)(2) and (b)(2), and the word "or" is used in new § 51.914(c)(1) and (d)(2) to make clear that the rules apply to either, or both, terminating switched access tandem switching and terminating switched access transport.

84. We adopt our proposed amendments to § 69.5(b)(2) to: (a) correct the inadvertent omission of the word "not"; (b) change the word "may" to "shall" to be consistent with other uses in these rules; and (c) make clear that it is "IXCs" and not "LECs" that are not being charged access charges under our Access Stimulation Rules. We make

similar amendments to § 69.5(b)(1) to be consistent with § 69.5(b)(2). Thus, we correct "may not" to "shall not." We also make a wording clarification by adding "of this part" to the two references to "§ 69.4(b)(5)" in $\S 69.5(b)(1)$ and (2). Finally, we edit text in $\S 69.5(b)(1)$ and (2), for consistency between those sections. Thus, the middle of both sections now refers to traffic that is destined "for a competitive local exchange carrier, or a rate-ofreturn local exchange carrier, or is destined, directly or indirectly, for an IPES Provider, where such carrier or Provider is engaged in Access Stimulation." These are conforming and non-substantive edits made to ensure consistency in our Access Stimulation Rules. These amendments are shown in Appendix A.

D. Legal Authority

85. We conclude that sections 201, 251, and 254 of the Act provide us with the authority needed to adopt the definitions, rule changes, and rule additions contained in this Order. Several commenters support our tentative conclusion in this regard in the Further Notice and the use of ancillary authority pursuant to section 4(i) of the Act. Commenters also point out that the rules we adopt in the Order are similar to other requirements the Commission has imposed on IP providers. Although the Commission has never asserted expansive jurisdiction over IP providers, it has consistently adopted rules to address specific issues and serve the public interest. The rules we adopt today are consistent with that practice. Our new rules directed at IPES Providers are narrowly tailored to address specific concerns related to access arbitrage. For example, although we require IPES Providers to calculate their traffic ratios and comply with the Access Stimulation Rules' reporting requirements, we do not require an access-stimulating IPES Provider to pay an Intermediate Access Provider's tandem and transport access charges.

86. Section 201 of the Act. In the Access Arbitrage Order, the Commission determined that imposing tariffed tandem switching and tandem switched transport access charges on IXCs for terminating access-stimulation traffic is an unjust and unreasonable practice under section 201(b) of the Act. In rejecting challenges to the Access Arbitrage Order, the United States Court of Appeals for the D.C. Circuit held that "[o]n its face, Section 201(b) gives the Commission broad authority to define and prohibit practices or charges that it determines unreasonable. Fees intentionally accrued by artificially

stimulating and inefficiently routing calls would appear to fall within that wide authority." Thus, we find that we have ample authority to adopt the limited rule revisions in this Order.

87. Providers' attempts to assess tandem switching or tandem switched transport access charges on IXCs for delivering traffic to access-stimulating IPES Providers are virtually indistinguishable from practices the Commission has already found to be unjust and unreasonable. Section 201(b) of the Act gives us the authority to "prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act.' This language provides us with the authority to prohibit Intermediate Access Providers or other LECs from charging IXCs tariffed tandem switching and transport access charges for traffic routed to an access-stimulating IPES Provider, or an access-stimulating LEC. Furthermore, section 201(b) grants us authority to ensure that all charges and practices "in connection with" a common carrier service are "just and reasonable." This authority encompasses a situation, such as here, where an IPES Provider is receiving traffic from Intermediate Access Providers and/or LECs for the purpose of engaging in access arbitrage. Thus, section 201(b) grants us authority to require IPES Providers to designate the Intermediate Access Provider(s), if any, that will provide terminating switched access tandem switching and transport services, and to require IPES Providers to calculate their traffic ratios and notify Intermediate Access Providers, IXCs, and the Commission if the IPES Provider is engaged in access stimulation. Intermediate Access Providers will then be able to determine whether they can lawfully charge IXCs for interstate and intrastate tandem switching and transport services (and IXCs can determine if such charges are appropriate).

88. Sections 251 and 254 of the Act. Our authority to adopt these rule revisions is also rooted in other sections of the Act on which the Commission relied in the Access Arbitrage Order. First, section 251(b)(5) of the Act gives us authority to regulate exchange access and providers of exchange access, during the transition to bill-and-keep. Indeed, the Commission "br[ought] all traffic within the section 251(b)(5) regime" years ago, as part of the reforms adopted in the USF/ICC Transformation Order. Second, section 251(g) of the Act provides us with the authority to address problematic conduct that occurs during the ongoing transition to billand-keep. Third, section 254 of the Act

provides the Commission with the authority to eliminate implicit subsidies. To the extent that the access charges paid by IXCs for accessstimulation traffic continue to subsidize LEC networks, section 254 gives us the authority to adopt the rules in this Order to eliminate those implicit subsidies. The rules we adopt are intended to encourage terminating LECs and IPES Providers to make efficient interconnection choices in the context of access-stimulation schemes and are thus consistent with longstanding Commission policy and Congressional direction. Accordingly, sections 201, 251, and 254 of the Act give us the authority to adopt the rules described in this Order.

89. Section 4(i) of the Act. Although we conclude that the statutory sections identified above provide us sufficient authority to adopt our revised rules, we also conclude that our ancillary authority pursuant to section 4(i) of the Act provides an additional, independent basis to adopt limited rules with respect to IPES Providers. Commenters agreed with this conclusion; no commenters disagreed. Section 4(i) of the Act gives the Commission the authority to perform acts, adopt rules, and issue orders, as necessary in the execution of its functions. The D.C. Circuit has determined that the Commission's exercise of its ancillary authority is appropriate when "'(1) the Commission's general jurisdictional grant under Title I [of the Act] covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission's effective performance of its statutorily mandated responsibilities." The requirements we adopt today, that are applicable to IPES Providers, are "reasonably ancillary to the Commission's effective performance of [its] responsibilities." Specifically, IPES Providers interconnected with the PSTN and exchanging IP traffic clearly provide "interstate... communication by wire or radio" pursuant to section 152(a) of the Act. The rules we adopt, that are applicable to IPES Providers, are reasonably ancillary to our established authority to deter access arbitrage. For example, the Commission has found it to be an unjust and unreasonable practice under section 201(b) of the Act for IXCs to pay terminating tandem switching and tandem switched transport charges for the delivery of access-stimulation traffic. The record indicates that IPES Providers have been inserted into the call flow in an effort to evade this holding and for parties to continue to engage in access stimulation. Therefore,

we are justified in asserting our ancillary authority in adopting rule revisions applicable to IPES Providers to help deter access arbitrage and ensure just and reasonable practices under our statutory responsibilities provided in section 201(b) of the Act.

90. Similarly, as the Commission has repeatedly made clear, it may, pursuant to section 251(b)(5), require the transition of access charges to a bill-andkeep framework. And, the Commission has recognized that section 251(g) grandfathers the historical exchange access system "until the Commission adopts rules to transition away from the system." In the Access Arbitrage Order the Commission found that access stimulation arises, "in significant part, because of ways in which the Commission's planned transition to billand-keep is not yet complete, and in that context, we find it necessary to address problematic conduct that we observe on a transitional basis until that comprehensive reform is finalized." In this Order, we have found that IPES Providers are inserted into the call flow for the purpose of collecting inflated, tariffed terminating tandem switching and transport access charges from IXCs. This practice is contrary to the Commission's stated goal of transitioning to bill-and-keep; that is, reducing the access charges carriers pay one another. Taking action to deter the insertion of IPES Providers into a call flow, in direct contravention of Commission precedent, orders and rules, is reasonably ancillary to our statutory mission to ensure just and reasonable rates and practices under section 201(b) of the Act.

91. Finally, as relevant here, the Commission has previously applied the statutory requirements of section 254 to VoIP providers pursuant to its ancillary authority. Specifically, the Commission found that its statutory requirement to establish "specific, predictable and sufficient mechanisms . . . to preserve and advance universal service' necessitated that VoIP providers contribute to the Universal Service Fund. As discussed above, section 254 also requires the elimination of implicit subsidies. Asserting ancillary authority over IPES Providers will help ensure that LEC networks are not implicitly subsidized by access charges for accessstimulation traffic. This action will help close a perceived loophole in our rules that has been exploited by those interested in continued arbitrage of our access charge regime and the improper use of access charges to fund "free," or no-cost to the consumer, high-volume calling services. For these reasons, we conclude that requiring IPES Providers,

as defined for the purposes of our Access Stimulation Rules, to comply with our limited revised rules is reasonably ancillary to the Commission's effective performance of its statutory responsibilities as described above.

E. Cost Benefit Analysis

92. Harms of Access Arbitrage. Access arbitrage exploits our intercarrier compensation regime by requiring the payment of terminating switched access tandem switching and switched access transport charges for activities and to providers that our policies are not intended to benefit. As Bandwidth explains, "[s]o long as access charges exist, . . . parties that originate and terminate traffic have an incentive to arbitrage the associated economies for themselves, their affiliates, and their carrier partners. The purpose of this proceeding is to reduce the arbitrage and fraud based on that incentive.' Parties pursue access arbitrage opportunities by artificially stimulating traffic, and then routing that traffic along more expensive, and/or less efficient, call paths. We first outline how the actions we take today will reduce the various harms caused by access arbitrage. We then show that the expected benefits from reducing just one of the harms—reducing the burden on IXCs to avoid being exploited—exceed the estimated costs of our actions.

93. The record does not allow us to fully quantify the cost of artificial traffic stimulation and inefficient routing, but given that tens of millions of dollars of payments are made to access arbitrageurs, these costs are likely high. The waste of inefficient traffic routing is acute because the party that chooses the call path does not pay the relevant intercarrier compensation charges, and instead typically gains from them. The costs of access stimulation are also likely large because the costs of these traffic-generating activities are not fully paid for by the users of the high-volume calling services, who often pay nothing for these services. This means some consumers use such services even though they value them less than the cost of supply. It also means consumers who do not use the high-volume calling services effectively pay for them when they purchase other

they purchase other telecommunications services at rates that are higher because they are based on recovering the costs of artificially inflated access charges their carriers must pay to deliver access-stimulation traffic. These rates unnecessarily and inefficiently curtail demand for those other telecommunications services. If providers of high-volume calling

services were to charge prices that wholly recovered the costs of arbitrage (rather than a portion of those costs being borne by consumers who do not use high-volume calling services), then purchases of the high-volume calling services would decline, leaving only purchases where the consumer values the service at more than its cost. Every call minute so reduced would help eliminate waste or create value equal to the difference between the cost-covering prices and these low-demand consumers' valuations of the service. At the same time, a reduction in the costs paid by other consumers due to a decrease in arbitrage would efficiently expand the use of telecommunications services, to the benefit of the general public by, for example, reducing call congestion and service disruptions caused by access stimulation.

94. Behavior driven by access arbitrage also threatens the Commission's mandate to ensure that telecommunications services are provided at just and reasonable rates. The telecommunications network depends on carriers being able to exchange vast quantities of traffic every minute in an efficient and reasonable manner at just and reasonable rates absent the artificial inflation of costs due to arbitrage. Without the actions we take today, this process of exchanging traffic—fundamental to personal and business interactions across our nation—would be undermined, thereby threatening the longer-term viability of the network. We are not able to quantify this harm with a specific cost in dollars, but any threat to the long-term viability of the nationwide communications network is intolerable and subject to our legislative mandate to ensure just and reasonable rates and practices for

95. Lastly, service providers seeking to avoid being exploited by access arbitrageurs must engage in costly defensive measures that would be unnecessary in the absence of access arbitrage. Examples of these wastes include:

- disputes over questionable demands for payment by tandem service providers that send calls to apparent access stimulators;
- attempts by IXCs to identify the sources of traffic that appears to have been arbitraged; and
- time and money spent by parties seeking to protect against or reduce access arbitrage opportunities, as in this proceeding.

96. Evidence from AT&T allows us to demonstrate the costs parties incur in seeking to avoid being exploited by access arbitrageurs would vastly exceed

the costs parties would incur as a result of the rules we adopt today. For example, AT&T reported spending 15,000 employee-hours over three years to identify and combat access stimulation. Applying an hourly rate of \$50, the annual expense of this labor for AT&T alone would come to \$250,000. If the Commission takes no action, AT&T would incur similar annual costs every year. Even if, being conservative, our actions were to save AT&T just half of the costs it may incur in only three years, this would be a benefit of approximately \$300,000. The actual cost savings will be much higher, however: AT&T will save costs every year well beyond just a three-year period. In addition, AT&T is only one of many IXCs that are harmed by access arbitrage. Every IXC that delivers traffic to access stimulators will also realize savings. These estimates do not even count the gains from reducing the unquantified, but likely much more significant, harms discussed above.

97. Costs of Our New Rules. When the 2019 Access Arbitrage Order was adopted, at least 21 carriers were identified as allegedly engaging in access stimulation. At least five former access-stimulating LECs have notified the Commission that they have left the access-stimulation business. That suggests 16 LECs are engaged in access stimulation today. We assume a similar number of IPES Providers engage in access stimulation. In that case, our Access Stimulation Rules would impact approximately 30 providers. Our existing, modified and new Access Stimulation Rules will require those providers to: (1) perform traffic studies; (2) calculate traffic ratios to determine if they are engaged in access stimulation under the traffic ratios in our Access Stimulation Rules; (3) notify Intermediate Access Providers, IXCs, and the Commission if they are engaged in access stimulation; and (4) notify Intermediate Access Providers, IXCs, and the Commission if they are no longer engaged in access stimulation. Those access-stimulating providers that file tariffs may also have to: (1) adjust their billing systems to no longer bill IXCs; and (2) modify their tariffs to ensure that IXCs are not billed for tandem switching or tandem transport access charges for calls delivered to access-stimulating LECs or IPES Providers. As the Commission did in the 2019 Access Arbitrage Order, we estimate that the required effort for each firm (here, a LEC or IPES Provider) would be unlikely to exceed 100 hours of work. By applying an hourly rate of \$100, the present value of the costs that

all access-stimulating LECs or IPES Providers may incur would not exceed \$300,000.

98. The Benefits of Our New and Revised Rules Outweigh Their Costs. The rules we adopt today promote the integrity of tariffed rates for tandem switching and tandem switched transport services, and hence the goal of connectivity—the ability of consumers to connect with each other across the entire U.S. telecommunications network—at just and reasonable rates. By meeting our legislative responsibility to ensure IXCs do not pay tariffed tandem switching and transport rates for access-stimulation traffic, which the Commission has found to be an unjust and unreasonable practice, we help to protect the policies that underlie our intercarrier compensation rules, and the widespread willingness of carriers to interconnect and deliver calls across the network. Although the bulk of the benefits of maintaining the ability to connect with each other cannot be quantified, as we have shown, even the quantifiable components are significant and likely are vastly greater than \$300,000—our present value estimate of the costs of our actions.

Procedural Matters

99. Paperwork Reduction Act Analysis. This document may contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13. All such new or modified information collection requirements will be submitted to OMB for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on any new or modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4). we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

100. In this Order, we have assessed the effects of requiring IPES Providers to keep necessary records, calculate applicable ratios, and provide required third-party disclosure of certain information to the Commission, parties they do business with and the public, and find that IPES Providers likely keep this information and perform these responsibilities in the normal course of business. Therefore, these additional requirements should not be overly burdensome. We do not believe there are many access-stimulating IPES

Providers operating today but note that of the small number of accessstimulating IPES Providers in existence, most, if not all, will be affected by this Order. We believe that accessstimulating IPES Providers are typically smaller businesses and may employ fewer than 25 people. We sought comment on the potential effects of the information collection rules we adopt today in the Further Notice, and we received no comment specifically addressing burdens on small business concerns either in response to this request or on our Initial Regulatory Flexibility Act Analysis. We find the benefits that will be realized by a decrease in the uneconomic effects of access stimulation outweigh any burden associated with the changes required by this Second Report and Order.

101. Congressional Review Act. The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs that these rules are "non-major" under the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of this Second Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. 801(a)(1)(A).

102. Final Regulatory Flexibility Analysis. As required by the Regulatory Flexibility Act of 1980 (RFA), as amended, an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Further Notice of Proposed Rulemaking for the access arbitrage proceeding. We sought written public comments on the proposals in the Further Notice, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Final Rules

103. For over a decade, the Commission has combatted arbitrage of its access charge regime, which ultimately raises the rates consumers pay for telecommunications service. In the 2011 USF/ICC Transformation Order, the Commission adopted rules identifying local exchange carriers (LECs) engaged in access stimulation and requiring that such LECs lower their tariffed access charges. In 2019, to address access arbitrage schemes that persisted despite prior Commission action, the Commission adopted the Access Arbitrage Order, in which it revised its Access Stimulation Rules to prohibit LECs and Intermediate Access Providers from charging interexchange carriers (IXCs) for terminating tandem

switching and transport services used to deliver calls to access-stimulating LECs.

104. Since the 2019 rules were implemented, the Commission has received information about new ways entities are manipulating their businesses to continue their arbitrage schemes in the wake of the new rules. In this Order, we adopt rule revisions to close perceived loopholes in our Access Stimulation Rules that are being exploited by opportunistic access-stimulating entities whose actions ultimately cause consumers to continue to bear costs for services they do not use.

105. We modify our Access Stimulation Rules to address access arbitrage that takes place when an internet Protocol Enabled Service (IPES) Provider is incorporated into the call flow. When a LEC or Intermediate Access Provider delivers traffic to an IPES Provider and the terminating-tooriginating traffic ratios of the IPES Provider meet or exceed the triggers in the Access Stimulation Rules, the IPES Provider will be deemed to be engaged in access stimulation. In such cases, a LEC or an Intermediate Access Provider will be prohibited from charging an IXC tariffed charges for terminating switched access tandem switching and switched access transport for traffic bound to an IPES Provider whose traffic meets or exceeds the ratios in § 61.3(bbb)(1)(i) or (ii) of our Access Stimulation Rules. The IPES Provider will be responsible for calculating its traffic ratios and for making the required notifications to the affected IXC(s), Intermediate Access Provider(s) and the Commission. We likewise modify the definition of Intermediate Access Provider to include entities delivering traffic to an IPES Provider. The rules we adopt will serve the public interest by reducing the incentives and ability to send traffic over the Public Switched Telephone Network for the purpose of collecting tariffed tandem switching and transport access charges from IXCs to fund highvolume calling services, which the Commission has found to be an unjust and unreasonable practice.

106. The reforms adopted in this Order apply the same framework that we currently use for competitive LECs that have engaged in access stimulation to determine when an IPES Provider that was engaged in access stimulation no longer is considered to be engaged in access stimulation. The Access Stimulation Rules currently require traffic ratios to be calculated at the end office. The rules adopted today apply this manner of traffic calculations to IPES Providers as well. Affected entities must comply with the final rules no

later than 45 days after their effective date. The effective date is 30 days after publication in the **Federal Register** except for certain rule revisions which contain information collection requirements that are subject to review by the Office of Management and Budget under the Paperwork Reduction Act. The effective date for these latter rules will be announced separately by the Commission.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

107. The Commission did not receive comments specifically addressing the rules and policies proposed in the IRFA.

C. Response to Comments by Chief Counsel for Advocacy of the Small Business Administration

108. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel of the Small Business Administration (SBA) and to provide a detailed statement of any change made to the proposed rule(s) as a result of those comments.

109. The Chief Counsel did not file any comments in response to the proposed rule(s) in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the Final Rules Will Apply

110. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term 'small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; (3) satisfies any additional criteria established by the Small Business Administration (SBA).

111. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the

Small Business Administration's (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States, which translates to 32.5 million businesses.

112. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.

113. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as 'governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Ū.S. Census Bureau data from the 2017 Census of Governments indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number, there were 36,931 general purpose governments (county, municipal, and town or township) with populations of less than 50,000 and 12,040 special purpose governments independent school districts with enrollment populations of less than 50,000. Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of "small governmental jurisdictions."

114. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception,

establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.

115. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were engaged in the provision of fixed local services. Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

116. Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were fixed local exchange service providers. Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

117. Incumbent Local Exchange Carriers (Incumbent LECs). Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 1,227 providers that reported they were incumbent local exchange service providers. Of these providers, the Commission estimates that 929 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

118. Competitive Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. Wired Telecommunications Carriers is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 3,956 providers that reported they were competitive local exchange service providers. Of these providers, the Commission estimates that 3,808 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

119. Interexchange Carriers (IXCs). Neither the Commission nor the SBA have developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054

firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 151 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 131 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

120. Local Resellers. Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry. The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year. Of that number, 1,375 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 293 providers that reported they were engaged in the provision of local resale services. Of these providers, the Commission estimates that 289 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

121. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide. Based on industry data, there are about 420 cable companies in the U.S. Of these, only seven have more than 400,000 subscribers. In addition,

under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Based on industry data, there are about 4,139 cable systems (headends) in the U.S. Of these, about 639 have more than 15,000 subscribers. Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

122. Cable System Operators (Telecom Act Standard). The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice. Based on industry data, only six cable system operators have more than 677,000 subscribers. Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million. Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

123. All Other Telecommunications. This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Providers of internet services (e.g., dial-up ISPs) or Voice over internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry. The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small. U.S. Census Bureau data for 2017 show that there

were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than \$25 million. Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

124. The rule revisions adopted in the Order will affect LECs, Intermediate Access Providers, and IPES Providers. This Order modifies our Access Stimulation Rules to address arbitrage which takes place when an IPES Provider is incorporated into the call flow. In this Order, we adopt rules to further limit or eliminate the occurrence of access arbitrage, including access stimulation, which could affect potential reporting requirements. The adopted rules also contain recordkeeping, reporting, and thirdparty notification requirements for access-stimulating LECs and IPES Providers, which may impact small entities. Some of the requirements may also involve tariff changes.

125. The rules adopted in the Order require that when an Intermediate Access Provider or a LEC delivers traffic to an IPES Provider and the terminatingto-originating traffic ratios of the IPES Provider meet or exceed the triggers in the Access Stimulation Rules, the IPES Provider will be deemed to be engaged in access stimulation. In those cases, the IPES Provider will be responsible for calculating its traffic ratios and for making the required third-party notifications. As such, providers may need to modify their in-house recordkeeping to comply with the new rules. If the IPES Provider's traffic ratios meet or exceed the applicable rule triggers, it must notify the Intermediate Access Providers it subtends, the Commission, and affected IXCs. The Intermediate Access Provider is then prohibited from charging IXCs tariffed rates for terminating switched access tandem switching or terminating switched access transport charges.

F. Steps Taken To Minimize the Significant Economic Impact on Small Entities and Significant Alternatives Considered

126. The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources

available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for such small entities."

127. The actions taken by the Commission in the Order were considered to be the least costly and minimally burdensome for small and other entities impacted by the rules. As such, the Commission does not expect the adopted requirements to have a significant economic impact on small entities. Below we discuss actions we take in the Order to minimize any significant economic impact on small entities and some alternatives that were considered.

128. Transition Period To Assist Small Entity Compliance. To minimize the impact of changes that may affect entities, we implement up to a 45-day transition period for compliance. We expect that transition period will allow even small business entities adequate time to amend their tariffs and recordkeeping, reporting and third-party notification practices, if needed, to meet the requirements in the adopted rules. This will also allow time if parties choose to make additional changes to their operations as a result of our reforms to further reduce access stimulation. To ensure clarity and increase transparency, we require that access-stimulating LECs and IPES Providers notify affected IXCs, Intermediate Access Providers, and the Commission of their access-stimulating status within 45 days of PRA approval (or, for an entity that later engages in access stimulation, within 45 days from the date it commences access stimulation), and file a notice in the Commission's Access Arbitrage docket on the same date and to the same effect.

129. We announced aspects of the transition period in the Further Notice, and received no related comments. Such changes are also subject to the Paperwork Reduction Act approval process which allows for additional notice and comment on the burdens associated with the requirements. This process will occur after adoption of this Order, thus providing additional time for parties to make the changes necessary to comply with the newly adopted rules. Also, being mindful of the attendant costs of any reporting obligations, we do not require that affected entities adhere to a specific notice format. Instead, we allow each responding entity to prepare third-party notice and notice to the Commission in

the manner they deem to be most costeffective and least burdensome, provided the notice announces the entities' access-stimulating status and acceptance of financial responsibility. Furthermore, by electing not to require carriers to fully withdraw and file entirely new tariffs and requiring only that they revise their tariffs to remove relevant provisions, if necessary, we mitigate the filing burden on affected carriers.

130. We consider any potential billing system changes to be straightforward, but to allow sufficient time for affected parties, including small business entities, to make any adjustments. We grant small entities the same period from the effective date for implementing such changes. Thus, affected Intermediate Access Providers have 45 days from the effective date of this rule (or, with respect to those entities that later engage in access stimulation, within 45 days from the date such entities commence access stimulation) to implement any billing system changes or prepare any tariff revisions which they may see fit to file. The time granted by this period should help small business entities affected make an orderly, less burdensome, transition.

131. These same considerations were taken into account for LECs and IPES Providers that cease access stimulation, a change that carries concomitant reporting obligations and to which we apply associated transition periods for billing changes and/or for tariff revisions that, collectively, are virtually identical to those mentioned above.

G. Report to Congress

132. The Commission will send a copy of this Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. The Order and FRFA (or summaries thereof) will also be published in the **Federal Register**.

Ordering Clauses

133. Accordingly, it is ordered that, pursuant to sections 1, 2, 4(i), 201, 251, 254, and 303(r), of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 201, 251, 254, and 303(r), and section 1.1 of the Commission's rules, 47 CFR 1.1, this Second Report and Order is adopted.

134. It is further ordered that, pursuant to sections 1.4, 1.103 and 1.427 of the Commission's Rules, 47 CFR 1.4, 1.103, 1.427, the amendments to the Commission's rules as set forth in Appendix A are adopted, effective 30

days after publication in the **Federal** Register, except that the amendments to § 51.914(d) and (g) of the Commission's rules, 47 CFR 51.914(d) and (g), which may contain new or modified information collection requirements, will not become effective until the Office of Management and Budget completes review of any information collection requirements that the Wireline Competition Bureau determines is required under the Paperwork Reduction Act. Compliance with the amendments to the Commission's rules as set forth in Appendix A will be required 45 days following the effective date. The Commission directs the Wireline Competition Bureau to announce the effective dates and the compliance dates for § 51.914(d) and (g) by subsequent Public Notice.

135. It is further ordered that the Office of the Managing Director, Performance Evaluation and Records Management, shall send a copy of this Second Report and Order, including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A).

136. It is further ordered that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center shall send a copy of this Second Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 51

Communications; Communications common carriers; Telecommunications; Telephones.

47 CFR Part 61

Communications common carriers; Reporting and recordkeeping requirements; Telephones.

47 CFR Part 69

Communications common carriers; Reporting and recordkeeping requirements; Telephones.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Final Rules

For the reasons set forth above, the Federal Communications Commission amends parts 51, 61, and 69 of title 47 of the Code of Federal Regulations as follows:

PART 51—INTERCONNECTION

■ 1. The authority citation for part 51 continues to read as follows:

Authority: 47 U.S.C. 151-55, 201-05, 207-09, 218, 225-27, 251-52, 271, 332 unless otherwise noted.

■ 2. Revise § 51.914 to read as follows:

§51.914 Additional provisions applicable to Access Stimulation traffic.

- (a) Notwithstanding any other provision of this part, if a local exchange carrier is engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, it shall, within 45 days of commencing Access Stimulation, or within 45 days of July 3, 2023, whichever is later:
- (1) Not bill any Interexchange Carrier for interstate or intrastate terminating switched access tandem switching or terminating switched access transport charges for any traffic between such local exchange carrier's terminating end office or equivalent and the associated access tandem switch; and
- (2) Designate the Intermediate Access Provider(s), if any, that will provide terminating switched access tandem switching or terminating switched access tandem transport services to the local exchange carrier engaged in Access Stimulation; and
- (3) Assume financial responsibility for any applicable Intermediate Access Provider's charges for such services for any traffic between such local exchange carrier's terminating end office or equivalent and the associated access tandem switch.
- (b) Notwithstanding any other provision of this part, if a local exchange carrier is engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, it shall, within 45 days of commencing Access Stimulation, or within 45 days of July 3, 2023, whichever is later, notify in writing the Commission, all Intermediate Access Providers that it subtends, and Interexchange Carriers with which it does business of the following:

(1) That it is a local exchange carrier engaged in Access Stimulation; and

- (2) That it shall designate the Intermediate Access Provider(s), if any, that will provide the terminating switched access tandem switching or terminating switched access tandem transport services to the local exchange carrier engaged in Access Stimulation;
- (3) That the local exchange carrier shall pay for those services as of that
- (c) Notwithstanding any other provision of the Commission's rules, if an IPES Provider, as defined in

- § 61.3(eee) of this chapter, is engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, then within 45 days of commencing Access Stimulation, or within 45 days of July 3, 2023, whichever is later:
- (1) The IPES Provider shall designate the Intermediate Access Provider(s), if any, that will provide terminating switched access tandem switching or terminating switched access tandem transport services to the IPES Provider engaged in Access Stimulation; and further
- (2) The IPES Provider may assume financial responsibility for any applicable Intermediate Access Provider's charges for such services for any traffic between such IPES Provider's terminating end office or equivalent and the associated access tandem switch:
- (3) The Intermediate Access Provider shall not assess any charges for such services to the Interexchange Carrier.

(d) [Reserved].

- (e) In the event that an Intermediate Access Provider receives notice under paragraph (b) of this section that it has been designated to provide terminating switched access tandem switching or terminating switched access tandem transport services to a local exchange carrier engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, or to an IPES Provider engaged in Access Stimulation, directly, or indirectly through a local exchange carrier, and that local exchange carrier engaged in Access Stimulation shall pay or the IPES Provider engaged in Access Stimulation may pay for such terminating access service from such Intermediate Access Provider, the Intermediate Access Provider shall not bill Interexchange Carriers for interstate or intrastate terminating switched access tandem switching or terminating switched access tandem transport service for traffic bound for such local exchange carrier or IPES Provider but, instead, shall bill such local exchange carrier or may bill such IPES Provider for such services.
- (f) Notwithstanding paragraphs (a) through (c) of this section, any local exchange carrier that is not itself engaged in Access Stimulation, as that term is defined in § 61.3(bbb) of this chapter, but serves as an Intermediate Access Provider with respect to traffic bound for a local exchange carrier engaged in Access Stimulation or bound for an IPES Provider engaged in Access Stimulation, shall not itself be deemed a local exchange carrier engaged in Access Stimulation or be affected by paragraphs (a) and (b) of this section.

(g) [Reserved].

■ 3. Delayed indefinitely, § 51.914 is amended by adding paragraphs (d) and (g) to read as follows:

§ 51.914 Additional provisions applicable to Access Stimulation traffic.

* * * * *

- (d) Notwithstanding any other provision of the Commission's rules, if an IPES Provider, as defined in § 61.3(eee) of this chapter, is engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, it shall, within 45 days of commencing Access Stimulation, or within 45 days after [the effective date of this paragraph (d)which will be 30 days after the Commission publishes the notification of OMB approval in the **Federal Register**], whichever is later, notify in writing the Commission, all Intermediate Access Providers that it subtends, and Interexchange Carriers with which it does business of the following:
- (1) That it is an IPES Provider engaged in Access Stimulation; and
- (2) That it shall designate the Intermediate Access Provider(s), if any, that will provide the terminating switched access tandem switching or terminating switched access tandem transport services directly, or indirectly through a local exchange carrier, to the IPES Provider engaged in Access Stimulation; and
- (3) Whether the IPES Provider will pay for those services as of that date.
- (g) Upon terminating its engagement in Access Stimulation, as defined in § 61.3(bbb) of this chapter, the local exchange carrier or IPES Provider engaged in Access Stimulation shall provide concurrent, written notification to the Commission and any affected Intermediate Access Provider(s) and Interexchange Carrier(s) of such fact.

PART 61—TARIFFS

■ 4. The authority citation for part 61 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 154(j), 201–205, 403, unless otherwise noted.

■ 5. Section 61.3 is amended by revising paragraphs (bbb)(1) through (3), adding paragraphs (bbb)(5), revising paragraph (ccc), and adding paragraphs (eee) and (fff) to read as follows:

§61.3 Definitions.

* * * * * (bbb) * * *

(1) A Competitive Local Exchange Carrier serving end user(s) or an IPES Provider serving end user(s) engages in Access Stimulation when it satisfies either paragraph (bbb)(1)(i) or (ii) of this

- section; and a rate-of-return local exchange carrier serving end user(s) engages in Access Stimulation when it satisfies either paragraph (bbb)(1)(i) or (iii) of this section.
- (i) The rate-of-return local exchange carrier, Competitive Local Exchange Carrier, or IPES Provider:
- (A) Has an access revenue sharing agreement, whether express, implied, written or oral, that, over the course of the agreement, would directly or indirectly result in a net payment to the other party (including affiliates) to the agreement, in which payment by the rate-of-return local exchange carrier, Competitive Local Exchange Carrier, or IPES Provider is based on the billing or collection of access charges from interexchange carriers or wireless carriers. When determining whether there is a net payment under this rule, all payments, discounts, credits, services, features, functions, and other items of value, regardless of form, provided by the rate-of-return local exchange carrier, Competitive Local Exchange Carrier, or IPES Provider to the other party to the agreement shall be taken into account; and
- (B) Has either an interstate terminating-to-originating traffic ratio of at least 3:1 in an end office or equivalent in a calendar month, or has had more than a 100 percent growth in interstate originating and/or terminating switched access minutes of use in a month compared to the same month in the preceding year for such end office or equivalent.
- (ii) A Competitive Local Exchange Carrier or IPES Provider has an interstate terminating-to-originating traffic ratio of at least 6:1 in an end office or equivalent in a calendar month.
- (iii) A rate-of-return local exchange carrier has an interstate terminating-to-originating traffic ratio of at least 10:1 in an end office or equivalent in a three-calendar month period and has 500,000 minutes or more of interstate terminating minutes-of-use per month in the same end office in the same three-calendar month period. These factors will be measured as an average over the three-calendar month period.
- (2) A Competitive Local Exchange Carrier serving end user(s), or an IPES Provider serving end user(s), that has engaged in Access Stimulation will continue to be deemed to be engaged in Access Stimulation until: For a carrier or provider engaging in Access Stimulation as defined in paragraph (bbb)(1)(i) of this section, it terminates all revenue sharing agreements covered in paragraph (bbb)(1)(i) of this section and does not engage in Access Stimulation as defined in paragraph

- (bbb)(1)(ii) of this section; and for a carrier or provider engaging in Access Stimulation as defined in paragraph (bbb)(1)(ii) of this section, its interstate terminating-to-originating traffic ratio for an end office or equivalent falls below 6:1 for six consecutive months, and it does not engage in Access Stimulation as defined in paragraph (bbb)(1)(i) of this section.
- (3) A rate-of-return local exchange carrier serving end user(s) that has engaged in Access Stimulation will continue to be deemed to be engaged in Access Stimulation until: For a carrier engaging in Access Stimulation as defined in paragraph (bbb)(1)(i) of this section, it terminates all revenue sharing agreements covered in paragraph (bbb)(1)(i) of this section and does not engage in Access Stimulation as defined in paragraph (bbb)(1)(iii) of this section; and for a carrier engaging in Access Stimulation as defined in paragraph (bbb)(1)(iii) of this section, its interstate terminating-to-originating traffic ratio falls below 10:1 for six consecutive months and its monthly interstate terminating minutes-of-use in an end office or equivalent falls below 500,000 for six consecutive months, and it does not engage in Access Stimulation as defined in paragraph (bbb)(1)(i) of this section.
- (5) In calculating the interstate terminating-to-originating traffic ratio at each end office or equivalent under this paragraph (bbb), each Competitive Local Exchange Carrier, rate-of-return local exchange carrier or IPES Provider shall include in such calculation only traffic traversing that end office or equivalent and going to and from any telephone number associated with an Operating Company Number that has been issued to such Competitive Local Exchange Carrier, rate-of-return local exchange carrier or IPES Provider. The term "equivalent" in the phrase "end office or equivalent" means "End Office Equivalent," as defined in this section.
- (ccc) Intermediate Access Provider. The term means, for purposes of this part and §§ 51.914, 69.4(1), and 69.5(b) of this chapter, any entity that provides terminating switched access tandem switching or terminating switched access tandem transport services between the final Interexchange Carrier in a call path and:
- (1) A local exchange carrier engaged in Access Stimulation, as defined in paragraph (bbb) of this section; or
- (2) A local exchange carrier delivering traffic to an IPES Provider engaged in Access Stimulation, as defined in paragraph (bbb) of this section; or

(3) An IPES Provider engaged in Access Stimulation, as defined in paragraph (bbb) of this section, where the entity delivers calls directly to the IPES Provider.

* * * * *

(eee) *IPES* (Internet Protocol Enabled Service) Provider. The term means, for purposes of this part and §§ 51.914, 69.4(l) and 69.5(b) of this chapter, a provider offering a service that:

- (1) Enables communications;
- (2) Requires a broadband connection from the user's location or end to end;
- (3) Requires internet Protocolcompatible customer premises equipment (CPE); and
- (4) Permits users to receive calls that originate on the public switched telephone network or that originate from an Internet Protocol service.
- (fff) End Office Equivalent. For purposes of this part and §§ 51.914, 69.3(e)(12)(iv) and 69.4(l) of this chapter, an End Office Equivalent is the geographic location where traffic is delivered to an IPES Provider for delivery to an end user. This location shall be used as the terminating location for purposes of calculating terminating-to-originating traffic ratios, as provided in this section. For purposes of the Access Stimulation Rules, the term "equivalent" in the phrase "end office or equivalent" means End Office Equivalent.

PART 69—ACCESS CHARGES

■ 6. The authority citation for part 69 continues to read as follows:

Authority: 47 U.S.C. 154, 201, 202, 203, 205, 218, 220, 254, 403.

■ 7. Section 69.4 is amended by revising paragraph (1) to read as follows:

§ 69.4 Charges to be filed.

* * * * *

- (l) Notwithstanding paragraph (b)(5) of this section, a competitive local exchange carrier or a rate-of-return local exchange carrier engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, the Intermediate Access Provider it subtends, or an Intermediate Access Provider that delivers traffic directly or indirectly to an IPES Provider engaged in Access Stimulation, as defined in § 61.3(bbb) of this chapter, shall not bill an Interexchange Carrier, as defined in § 61.3(bbb) of this chapter, for interstate or intrastate terminating switched access tandem switching or terminating switched access tandem transport charges for any traffic between such competitive local exchange carrier's, such rate-of-return local exchange carrier's, or such IPES Provider's terminating end office or equivalent and the associated access tandem switch.
- 8. Section 69.5 is amended by revising paragraph (b) to read as follows:

§ 69.5 Persons to be assessed.

* * * * *

(b) Carrier's carrier charges shall be computed and assessed upon all Interexchange Carriers that use local exchange switching facilities for the provision of interstate or foreign

- telecommunications services, except that:
- (1) Competitive local exchange carriers and rate-of-return local exchange carriers shall not assess terminating interstate or intrastate switched access tandem switching or terminating switched access tandem transport charges described in § 69.4(b)(5) on Interexchange Carriers when the terminating traffic is destined for a competitive local exchange carrier, or a rate-of-return local exchange carrier, or is destined, directly or indirectly, for an IPES Provider, where such carrier or Provider is engaged in Access Stimulation, as that term is defined in § 61.3(bbb) of this chapter, consistent with the provisions of § 61.26(g)(3) of this chapter and § 69.3(e)(12)(iv).
- (2) Intermediate Access Providers shall not assess terminating interstate or intrastate switched access tandem switching or terminating switched access tandem transport charges described in § 69.4(b)(5) on Interexchange Carriers when the terminating traffic is destined for a competitive local exchange carrier, or a rate-of-return local exchange carrier, or is destined, directly or indirectly, for an IPES Provider, where such carrier or Provider is engaged in Access Stimulation, as that term is defined in § 61.3(bbb) of this chapter, consistent with the provisions of $\S 61.26(g)(3)$ of this chapter and § 69.3(e)(12)(iv). *

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