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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 51

[WC Docket No. 18-156; FCC 20-143; FR ID 17154]

8YY Charge Reform

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Commission takes definitive steps to address the arbitrage and fraud that have increasingly undermined the system of intercarrier compensation that currently underpins toll free calling. Those steps include transitioning 8YY end office originating charges to bill-and-keep over approximately three years and creating a single charge for 8YY tandem switching and transport services and capping it at a lower, uniform rate. The order caps rates for the database queries necessary to route toll free calls, reduces them to a national uniform rate over approximately three years, and limits such database query charges to one per call. Finally, the Commission allows carriers to use existing mechanisms to recover lost revenue. The measures will reduce the incentives for carriers to engage in 8YY access arbitrage and lower the costs of 8YY services overall.

DATES: The amendments in this document shall be effective [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** except for §§ 51.907(i) through (k) (instruction 4), 51.909(l) through (o) (instruction 5), and 51.911(e) (instruction 6.b.), which are delayed. The FCC will publish a document in the Federal Register announcing the effective date for those sections.

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SUPPLEMENTARY INFORMATION: This a final rule summary for the Commission's report and order released October 9, 2020. A full text copy of this document can be accessed at the following internet address: https://www.fcc.gov/document/fcc-modernizes-rules-toll-free-calls

I. BACKGROUND

1. 8YY services have long been a prominent fixture of the telecommunications landscape. Calls to 8YY numbers differ from other calls carried over the public switched telephone network in that the party receiving the call—not the party placing the call—pays the toll charges. When long-distance

calls were expensive, allowing consumers to call businesses and other institutions without worrying about the cost of toll service was a benefit to consumers and to the companies receiving their calls. Reductions in toll rates and the rise of unlimited, all-distance calling plans have largely eliminated separate toll charges for consumers, yet 8YY services continue to have significant value, as evidenced by the persistently high demand for toll free numbers. Businesses and other institutions increasingly use 8YY numbers to support branding efforts, and to facilitate and evaluate marketing efforts—by, for example, assigning specific numbers to individual advertising campaigns to track the effectiveness of those campaigns.

2. The record indicates that the percentage of originating traffic attributable to 8YY has grown significantly over the years and currently accounts for the vast majority of originating access traffic. According to AT&T, for example, in 2008, 8YY originating minutes accounted for 64% of all AT&T originating access minutes (including minutes from AT&T affiliates) and by 2019, they accounted for 83% of all originating access minutes. Increased demand for toll free numbers has led the Commission to authorize a half a dozen additional toll free codes beyond the original 800 code, including the 888, 877, 866, 855, 844, and 833 codes.

A. 8YY Routing and Intercarrier Compensation

3. To understand intercarrier compensation for 8YY calls, it is first necessary to understand how toll free calls are routed and how that differs from the routing of non-toll free calls. When a caller dials an 8YY number, the originating carrier does not simply pass the call to the customer's pre-subscribed interexchange carrier, as it would for a non-toll free call. Instead, to determine how to route a toll free call, the originating carrier typically queries an industrywide database operated by the Toll Free Number Administrator (the 8YY Database) to determine the 8YY provider for the dialed number. Typically, for calls routed over time-division multiplexing (TDM) based networks, to query the 8YY Database a carrier must route the 8YY call through a switch, equipped with a "service switching point." The service switching point "suspends" routing of the call and, during this suspension, sends a query over the signaling system 7 (SS7) channel to a service control point. Service control points are "regional databases that contain routing instructions for the toll free numbers located in . . . particular geographic regions." 8YY calls from customers served by local exchange carrier end offices that are not connected to a service control point can be routed to one of the local exchange carrier's tandem switches that is

equipped with a service control point, and the call is processed from there. Local exchange carriers that do not own a service control point can purchase database query services from carriers that do.

4. A database query produces a carrier identification code, which tells the local exchange carrier to route the call to the 8YY provider, typically an interexchange carrier, associated with that carrier identification code. The originating carrier then uses its own or an intermediate carrier's transport and switching facilities to route the call to the designated 8YY provider.

5. Carriers assess intercarrier compensation somewhat differently for 8YY calls than for other calls. When a caller places a regular long-distance call from a landline telephone, the caller's local exchange carrier routes that call to the long-distance carrier (interexchange carrier) used by the caller through pre-arranged direct connections with the interexchange carrier or through a nearby tandem switch and the interexchange carrier pays the local exchange carrier for originating the call. The interexchange carrier is then responsible for routing the call to its final destination and for paying any charges associated with its decisions about how to route the call. For its part, the interexchange carrier is paid by the customer that placed the call.

6. By contrast, when a caller makes a toll free call from a landline telephone, the 8YY provider pays the caller's local exchange carrier for originating the call and for performing the 8YY Database query. The 8YY provider also pays tandem switching and transport charges to intermediate carriers in the call path between the local exchange carrier and the 8YY provider. The 8YY customer compensates the 8YY provider for completing the call. The rates paid by 8YY providers for various access charges typically are tariffed rates which vary widely depending on where an 8YY call originates and how it is routed.

7. The situation is slightly different for 8YY calls placed using a wireless carrier. The Commission's rules prohibit wireless carriers from tariffing terminating or originating access charges. As a result, a wireless carrier cannot assess 8YY providers for originating end office charges, database query charges, or tandem switching or transport charges.

B. Impact of the 2011 *USF/ICC Transformation Order*

8. In the 2011 *USF/ICC Transformation Order* (76 FR 73830, Nov. 29, 2011), finding that the intercarrier compensation system had become "riddled with inefficiencies and opportunities for

wasteful arbitrage," the Commission undertook comprehensive reform of the intercarrier compensation system by adopting bill-and-keep "as the default methodology for all intercarrier compensation traffic." As a first step in moving intercarrier compensation toward bill-and-keep, the Commission established a plan to transition all terminating end office rates and some terminating tandem switching rates to bill-and-keep over six years for price cap carriers and competitive local exchange carriers that benchmark to price cap carriers and nine years for rate-of-return carriers and the competitive local exchange carriers that benchmark to them.

9. As part of the intercarrier compensation reforms adopted in the *USF/ICC Transformation Order*, the Commission created a transitional Eligible Recovery mechanism to mitigate revenue reductions wrought by the transition of terminating end office charges to bill-and-keep. The Commission defined as "Eligible Recovery" the amount of intercarrier compensation revenue reductions that price cap and rate-of-return incumbent local exchange carriers would be eligible to recover. An incumbent local exchange carrier's Eligible Recovery is based on a percentage of the reduction in intercarrier compensation revenues resulting from the reforms adopted in the *USF/ICC Transformation Order*. After calculating Eligible Recovery, incumbent local exchange carriers may recover that amount through Access Recovery Charges, subject to caps and, where eligible, Connect America Fund Intercarrier Compensation support. The Commission adopted a rebuttable presumption that these revenue recovery mechanisms would allow carriers to earn a reasonable return on their investment, and also adopted a Total Cost and Earnings Review to allow individual carriers to demonstrate that the rebuttable presumption is incorrect and that additional recovery is needed to prevent a taking.

10. In the *USF/ICC Transformation Order*, the Commission found that "originating charges for all telecommunications traffic subject to [its] comprehensive intercarrier compensation framework should ultimately move to bill-and-keep." It declined, however, to move originating access to bill-and-keep immediately. Instead, it capped most originating access charges as "a first step" in a "measured transition toward comprehensive reform." The Commission capped all interstate originating access charges and intrastate originating access charges for price cap carriers at their then current rates. The Commission also capped interstate originating access charges for rate-of-return carriers. But, it declined to cap intrastate originating rates for rate-of-return carriers to "control the size" of the Connect America Fund and to "minimize burdens on consumers." The Commission further specified that the access charge

reforms undertaken in the *USF/ICC Transformation Order* would "generally apply to competitive [local exchange carriers (LECs)] via the [competitive local exchange carrier (CLEC)] benchmarking rule," which allows competitive local exchange carriers to tariff interstate access charges "at a level no higher than the tariffed rate for such services offered by the incumbent LEC serving the same geographic area."

11. In the *USF/ICC Transformation Further Notice of Proposed Rulemaking (FNPRM)* (76 FR 78384, Dec. 16, 2011), the Commission committed to transition originating access charges to bill-and-keep and sought further comment on how to make that transition. It also specifically sought comment on the appropriate treatment of 8YY originating access, including the "need for a distinct 8YY resolution." There was wide variation in 8YY originating access charges when the Commission capped most 8YY originating access charges at their 2011 rates in the *USF/ICC Transformation Order*. As a result, such rates continue to vary widely among carriers. Database query charge rates, for example, range from $0.0015 to $0.015 per query.

C. 8YY Arbitrage and Abuse

12. The unique routing of, and compensation for, 8YY calls have created opportunities for arbitrage and other abuse of the intercarrier compensation system. As AT&T describes it, "originating access charges for 8YY calls inherently invite fraud and abuse, because they create a mismatch in pricing signals" and carriers "are increasingly exploiting this arbitrage opportunity, and . . . increasingly focusing their efforts on 8YY calling now that most terminating access charges have gone to bill-and-keep." Moreover, as the Commission observed in the *USF/ICC Transformation FNPRM*, "because the calling party chooses the access provider but does not pay for the toll call, it has no incentive to select a provider with lower originating access rates." Because 8YY originating access charges have not yet transitioned to bill-and-keep, neither the originating carrier nor any intermediate provider that performs tandem switching and transport has an incentive to use the lowest cost means of routing the call since both may collect access charges. Incentives for 8YY abuse are further enhanced by the fact that 8YY access and 8YY Database query rates vary significantly, creating incentives for some providers to use carriers with higher rates to increase their revenues. Commenters identify four types of abuse associated with 8YY calls: traffic pumping, benchmarking abuse, mileage pumping, and database query abuse.

13. 8YY traffic pumping, or "robocalling," occurs when an access-stimulating entity enters into a revenue sharing agreement with a local exchange carrier and then uses auto-dialing equipment to

generate significant amounts of 8YY traffic that the carrier passes on to the interexchange carrier for payment. This kind of abuse involves the generation of 8YY traffic that has no legitimate purpose and exists solely for the purpose of obtaining intercarrier compensation. As AT&T explains, "these fraudulent calling schemes cause a wide variety of harms" including inundating "8YY customers with unwanted calls that increase the 8YY customer's expense," and affect "the ability of legitimate calls to be completed or cause other systems to be disrupted." As a result, 8YY customers "must pay for the traffic pumpers' calls to their numbers, for the time wasted by congested incoming lines and lost employee productivity, and for the procurement of remedial services." 8YY robocallers have become very sophisticated and are able to display a different spoofed telephone number for each call they place to elude easy detection of their illegitimate calls.

14. A second type of benchmarking abuse occurs when an originating carrier in one part of the country sends its toll free calls to a competitive local exchange carrier located in a different part of the country where the incumbent local exchange carrier serving that geographic area has relatively high access charges. As AT&T explains, some competitive local exchange carriers "have set themselves up as 8YY 'aggregators,' agreeing to handle 8YY calls from many originating providers." The aggregating competitive local exchange carrier hands off its aggregated 8YY traffic to interexchange carriers in these more remote areas, thereby allowing the competitive local exchange carrier to charge higher access charges "relative to what the provider would have been able to charge in the incumbent LEC area where the call was actually placed."

15. As Bandwidth further explains, toll free aggregators "that are inserted into the call path by the originators of Toll Free traffic routinely ignore the routing instructions in the SMS 800 database." These toll free aggregators chosen by the originating carriers route 8YY calls to "whichever IXC or tandem is willing to pay the highest rate." This kind of arbitrage "increases the amount of revenue to be shared, often adds additional hops, and can result in failed calls . . . driving up costs and disrupting [carriers'] ability to properly manage their networks." These practices can also affect network management, causing unnecessary network congestion and ultimately distorting network investment.

16. A third type of 8YY arbitrage is mileage pumping, which occurs when a carrier artificially inflates the distance it routes an 8YY call to increase the transport revenues it receives when it hands off an 8YY call to the interexchange carrier that serves as the 8YY provider. Mileage pumping

occurs when “a CLEC tariffs a per-mile charge for transport and then either (i) bills the IXC for transport it does not actually provide (because it is provided by a different provider) or (ii) inefficiently routes traffic long distances—sometimes more than a hundred miles—to inflate the number of miles applied to the per-mile transport charge.”

17. Finally, there is 8YY Database query abuse, which results from relatively high and varied database query charges and the fact that often more than one carrier assesses a database query charge in the course of routing an 8YY call (i.e., double dipping). A significant portion of 8YY origination revenues are derived from assessing database query charges. The ability to assess high database query charges provides an additional incentive and revenue source for carriers engaged in other forms of 8YY arbitrage.

D. Recent Procedural History

18. In 2016, the Commission sought comment on a petition filed by AT&T which, in relevant part, sought forbearance from rules related to pricing regulation and tariffing of 8YY Database query charges. AT&T subsequently moved to withdraw its petition and the Commission granted its motion.

19. In 2017, the Wireline Competition Bureau (Bureau) issued a Public Notice seeking to update the record in the *USF/ICC Transformation Order* dockets on 8YY access charges, in part in response to an *ex parte* letter filed by Ad Hoc Telecommunications Users Committee (Ad Hoc). In its letter, Ad Hoc alleges that there has been an increase in 8YY-related arbitrage and asks the Commission to reduce or eliminate incentives for that arbitrage.

20. In 2018, the Commission adopted a further notice of proposed rulemaking (*8YY FNPRM*) (83 FR 31099, July 3, 2018) seeking comment on a proposal to move all 8YY originating access charges to bill-and-keep, impose a nationwide cap on 8YY Database query charges, and impose a limit of one query charge per 8YY call. The *8YY FNPRM* also invited commenters to “propose additional, or alternative, methods for reforming originating 8YY access charges” in ways that “would reduce abusive practices related to 8YY calls.” It also sought comment on potential sources of revenue recovery.

II. DISCUSSION

21. In this document, we take the next steps toward transitioning intercarrier compensation to bill-and-keep by adopting rules aimed at curtailing abuse of the 8YY intercarrier compensation regime

and preserving the value of toll free services. As an initial step, and to avoid further opportunities for arbitrage or rate increases during the transitions, we cap all originating 8YY end office, tandem switching and transport, and database query charges at their current rates as of the effective date of this *Order*. We then transition each of these rate elements. We reduce originating 8YY end office charges to bill-and-keep over three further steps beginning July 1, 2021 and ending July 1, 2023. We also adopt a single uniform nationwide rate cap of $0.001 per minute for originating 8YY tandem switching and transport access charges as of July 1, 2021. We reduce database query charges to a cap of $0.0002 per query in three steps ending July 1, 2023, and as of the effective date of this *Order*, we end double dipping by prohibiting carriers from charging for more than one query per call. These changes, which are consistent with recommendations in the USTelecom industry consensus proposal, will lower 8YY calling costs by removing inefficiencies, reducing incentives for carriers to use TDM networks and thereby encouraging the adoption of IP-based networks, and diminishing 8YY intercarrier compensation disputes. In making these changes to intercarrier compensation for 8YY traffic we continue our progress toward moving our intercarrier compensation system toward a bill-and-keep end state and drastically reduce the incentives that have led to the proliferation of 8YY arbitrage schemes.

E. Transitioning Originating 8YY End Office Charges

22. As proposed in the *8YY FNPRM* we transition originating 8YY end office charges to bill-and-keep. We agree with those commenters that argue that moving 8YY originating end office charges to bill-and-keep is the best way to remove the underlying incentives to route calls inefficiently and generally inflate the charges imposed on 8YY providers created by the existence of originating access charges for 8YY traffic. We also agree with those commenters that propose a three-year transition period as one that will give carriers sufficient time to adjust to this new regime.

23. As the initial step, we cap all intrastate originating 8YY end office rates not previously capped at their current levels as of the effective date of this *Order*. As the Commission explained when it capped most originating access rates, capping rates “ensures that no rates increase during reform” and also “minimize disruption to consumers and service providers by giving parties time, certainty, and stability” as they adjust to the changes we make in this document.

24. Then, effective July 1, 2021, we require all local exchange carriers to bring any intrastate originating 8YY end office access rates that exceed the comparable interstate rates into parity with the

comparable interstate rates. As the Commission has recognized, intrastate rates that vary from interstate rates create "incentives for arbitrage and pervasive competitive distortions within the industry." By bringing intrastate rates into parity with comparable interstate rates, this initial step will "minimize opportunities for arbitrage that could be presented by disparate intrastate rates."

25. In the *USF/ICC Transformation Order*, the Commission declined to cap intrastate originating rates for rate-of-return carriers because it wanted to "minimize[] the burden intercarrier compensation reform [would] place on consumers and . . . help manage the size of the access replacement mechanism." The Commission sought comment on whether to "initially defer the transition to bill-and-keep for originating access to the states to implement." Some state commissions have urged the Commission to proceed cautiously, if at all, and to allow an additional time period to transition originating access to bill-and-keep. In the nine years since the Commission adopted the *USF/ICC Transformation Order*, the industry has transitioned the majority of interstate and intrastate terminating charges to bill-and-keep without disrupting carriers' ability to operate and update their networks. Thus, the Pennsylvania Public Utilities Commission's argument that it would be premature for the Commission to proceed with any further intercarrier compensation reform because "the Commission has not yet fully implemented the initial rate transition for terminating access charges that it adopted in 2011" is now moot. Likewise, the Pennsylvania Public Utilities Commission's concern that a "notice to refresh the record is not the proper vehicle to consider and adopt any comprehensive proposals" to reform intercarrier compensation is no longer relevant. We only revise originating access for 8YY services, not other aspects of intercarrier compensation, and we do so after the Commission released a further notice of proposed rulemaking (*8YY FNPRM*) and a rigorous examination of the record we have received in response to that FNPRM. We find no reason to further delay the transition of intrastate originating 8YY access charges for rate-of-return carriers. To the contrary, we find that bringing some rate-of-return carriers' intrastate originating 8YY end office access rates to parity and capping them all will reduce arbitrage with minimal disruption, and will provide an appropriate starting point for the multiyear transition of these rates to bill-and-keep that we adopt herein.

26. Although the Commission capped price cap carriers' interstate and intrastate originating rates in the *USF/ICC Transformation Order*, the Commission did not require those carriers to bring originating intrastate rates to parity with the comparable originating interstate rates. If a price cap

carrier's capped originating intrastate end office rates are above the comparable interstate rates, that carrier is required to reduce its intrastate rates to interstate levels on July 1, 2021.

27. After reducing or capping intrastate 8YY end office rates, we next transition all intrastate and interstate originating 8YY end office charges from their capped amounts to bill-and-keep in two equal reductions. Effective July 1, 2022, we reduce all originating 8YY end office rates to half of their capped levels. Then, effective July 1, 2023, we reduce all originating 8YY end office rates to bill-and-keep.

28. Moving originating 8YY end office charges to bill-and-keep is consistent with the Commission's long-held determination that bill-and-keep will be the end state for all access charges, including originating access. It therefore aligns with the Commission's adoption of bill-and-keep for local exchange carriers' terminating end office access charges in the 2011 *USF/ICC Transformation Order* as well as the Commission's decision that wireless providers cannot impose access charges. Indeed, as Ad Hoc observes, "[t]he legitimacy of the use of bill-and-keep as a mechanism for access traffic has not been the subject of serious debate for some time."

29. We also agree with those commenters that argue that moving to bill-and-keep is the best approach to reducing (or eliminating) incentives for 8YY arbitrage and other abuse. Under our existing rules, the interexchange carrier is unable to choose the originating call path and must pay the local exchange carrier's charges to originate the call, and there is evidence that carriers routinely ignore the routing direction provided by the 8YY provider in the 8YY Database. This mismatch in incentives is "what *inherently* creates the opportunity for arbitrage and fraud," as originating local exchange carriers not only lack incentives to minimize intercarrier compensation charges but actually have an incentive to inflate those charges. As Ad Hoc explains, "[b]ecause the choosing party has no incentive to select the provider with the lowest access charges, there is no competitive pressure on those charges. But there are powerful incentives for unscrupulous actors to take advantage of this broken market by generating traffic to 8YY numbers for no purpose other than to inflate the access charge revenues that are ultimately paid by toll free service customers." Bill-and-keep, by contrast, "will incentivize efficient call routing and will benefit the public interest," as the originating "LEC would recover its costs from its end user"—or from existing recovery mechanisms—and will face competitive pressure to make cost-efficient routing decisions.

30. The Commission previously adopted bill-and-keep as the default methodology for all intercarrier compensation traffic and recognized that adopting bill-and-keep "imposes fewer regulatory burdens and reduces arbitrage and competitive distortions inherent in the current [intercarrier compensation] system, eliminating carriers' ability to shift network costs to competitors and their customers." We find no merit to arguments that 8YY traffic should be excluded from our actions to move intercarrier compensation to bill-and-keep. Contrary to some commenters' claims, apart from the obligation of 8YY providers to pay the long-distance costs, there is nothing unique about 8YY traffic that militates in favor of exempting such traffic from a bill-and-keep regime. Bill-and-keep itself remains "competitively neutral, treating all carriers equally." And, moving end office charges to bill-and-keep will significantly reduce 8YY arbitrage, given that end office charges represent a majority of all originating access charges. In sum, we agree that adopting bill-and-keep for 8YY end office charges "fosters competition, is simple to establish and administer, and addresses arbitrage," and "the 'competitive distortions' 8YY access charges create."

31. Some commenters argue against moving to bill-and-keep and instead urge us to adopt narrower, more targeted rules to prohibit specific 8YY arbitrage or abusive practices or simply pursue enforcement through the Commission's Enforcement Bureau or the courts. Targeted enforcement actions are important, but insufficient because enforcement under our current rules for the provision of 8YY services would not be able to address the underlying incentives that drive 8YY arbitrage and abuse. While adopting rules narrowly targeting specific practices would likely result in parties revising their arbitrage schemes to circumvent the specific prohibitions, adopting narrower solutions would also be "impractical and unworkable as a matter of day-to-day implementation," and would continue to place the burden of detection and enforcement on 8YY providers, rather than on the carriers that are abusing the current access charge regime. We also agree with AT&T that there is a risk that "*ex ante* prohibitions will not deter bad actors from pursuing traffic-pumping or other arbitrage schemes, and the result of any such system will inevitably be extensive *ex post* litigation and billing disputes." And despite requests for targeted enforcement against, for example, "robocalling-enabled arbitrage or other bad practices," commenters do not provide specifics that would allow us to identify these "bad practices," or what specific measures we should take to curtail them. Without eliminating the financial incentives to engage in arbitrage, the Commission would continually find itself reacting to new arbitrage schemes designed to exploit our rules, given the creativity and adaptability of entities engaging in arbitrage. We conclude that

focusing on the next steps in transitioning 8YY access rates to "bill-and-keep eliminates the financial incentives" for 8YY arbitrage and is more likely to eliminate these practices than targeted measures.

32. For similar reasons, we also decline to adopt Aureon's proposal that instead of modifying our intercarrier compensation rules we adopt a blanket prohibition against "8YY abuse as an unjust and unreasonable practice." Aureon offers no details about the types of conduct it would have us prohibit, let alone how we could effectively enforce such a prohibition. Further, nothing in Aureon's submission or in the record supports its assertion that merely adopting an amorphous prohibition against 8YY abuse would lead industry to "work cooperatively and take the legal and technical actions necessary to prevent unlawful 8YY calls." Aureon's contention that the Commission's "indirect approaches, which have so far focused upon financial incentives and modifications to intercarrier compensation, have not stopped access arbitrage" is not supported by the facts. In 2011, before the *USF/ICC Transformation Order* took effect, terminating access arbitrage was estimated to cost carriers and their customers as much as \$330 million to \$440 million annually. By 2019, that estimate declined to \$60 million to \$80 million, a dramatic reduction that we believe was largely the result of the Commission's reform efforts. The rules we adopted last year in the access arbitrage proceeding appear to be further reducing the costs of terminating access arbitrage. The rules we adopt in this document are another step in the Commission's "comprehensive intercarrier compensation reform," and continue our effort to address, over time, carriers' incentives and ability to abuse our intercarrier compensation rules.

33. We find unnecessary suggestions that we adopt rules requiring local exchange carriers to offer direct connections to interexchange carriers. AT&T, for example, proposes that we adopt a rule requiring that local exchange carriers either offer direct connections to interexchange carriers for originating 8YY access or, if the originating carrier refuses to do so, require the local exchange carrier to assume financial responsibility for delivering the call to the interexchange carrier. AT&T argues that its proposal would alleviate concerns that tandem providers would be unable to charge for their services if the Commission moved tandem switching and transport to bill-and-keep because tandem providers have no end users. But the non-zero rate cap we adopt for tandem switching and transport as we continue our transition ultimately to bill-and-keep will allow intermediate tandem providers to charge for their services, obviating any need to adopt AT&T's proposal. Moreover, we agree with Aureon that AT&T's proposal would not accomplish the goals of this proceeding.

34. Other, more detailed direct connection proposals are both unnecessary to achieve the objectives of this proceeding and create additional challenges. For example, West's proposal that we require all carriers to negotiate bilateral direct connections in good faith would require us to determine whether such negotiations were undertaken in good faith, a factual question which would be difficult to resolve. O1's proposal that we mandate that carriers offer direct connections "to requesting carriers that send or receive at least four T-1s of originating/terminating traffic per month" extends to issues beyond the scope of this proceeding and the current record does not provide a sufficient basis for us to evaluate the impact these proposals would have on the industry.

35. We likewise decline requests that we undertake other broad changes to our intercarrier compensation system in this proceeding, such as transitioning all originating access charges to bill-and-keep or addressing "all of the remaining intercarrier compensation transition issues" stemming from the *USF/ICC Transformation Order* holistically rather than in a piecemeal fashion. Such broad changes would be inconsistent with the incremental approach the Commission has taken to intercarrier compensation reform and the transition to bill-and-keep, which is designed to provide carriers the necessary time and flexibility to adapt their businesses to the changes we adopt without undue disruption. Those proposals would also "fail[] to account in *any* way for the differences between 8YY originating access functionality and terminating access functionality," most notably network functions, such as database queries, that are particular to 8YY traffic.

36. We also decline suggestions to issue a second further notice of proposed rulemaking to seek comment on "more refined proposals" for combating 8YY abuses. Issuing another further notice would only create uncertainty and unnecessarily delay our ability to address 8YY arbitrage schemes and eliminate the harms such schemes continue to inflict on both consumers and on 8YY subscribers.

37. We also disagree with parties that suggest the record contains insufficient data to justify adopting new rules to combat 8YY arbitrage. According to AT&T, for example, "arbitrage and fraud in connection with 8YY calling have become widespread and are growing." In quantifying that growth, AT&T specifies that in 2008, 8YY traffic was 64% of all originating traffic and by 2019, it had grown to 83% of all originating traffic. Verizon echoes AT&T's claims, alleging that 8YY abuse is "proliferating since terminating access rates have transitioned to bill-and-keep." Given AT&T and Verizon's role as 8YY providers and the relatively comprehensive market data they have access to, we find their

characterizations of the 8YY market to be an acceptable basis for the actions we take. Furthermore, 8YY subscribers concur in this assessment. The record also makes clear that 8YY subscribers "have seen an increase in the number of fraudulent calls terminating to their toll free numbers" and that "fraudulent access stimulation in the 8YY market is not an isolated problem." 8YY customers have had to "pay for the traffic pumpers' calls to their numbers, for the time wasted by congested incoming lines and lost employee productivity, and for the procurement of remedial services from companies that provide voice network security services . . . ." And in a 2016 survey conducted by the Toll Free Number Administrator, 35% of all Toll Free Responsible Organizations reported that traffic pumping was a "key obstacle facing the industry." The Toll Free Number Administrator estimates that up to 20% of toll free minutes for some carriers could be the result of traffic pumping. This and other evidence convince us of the pressing need to reform the 8YY access charge regime. Reducing the costs of 8YY arbitrage is more than sufficient justification for the rules we adopt in this *Order*, and the record regarding the burdens 8YY arbitrage imposes on carriers, toll free subscribers, and consumers is extensive. Various carriers describe a "wide variety of harms" that 8YY schemes cause ranging from unwanted calls and increased expenses to call completion issues. While Ad Hoc explains that its members have seen an increase in the number of fraudulent calls terminating to their toll free numbers, resulting in tied up lines, lost productivity, and the need for unnecessary remedial expenses such as voice network security services. Critics of the record in this proceeding set too high an evidentiary threshold for Commission action; have not submitted data in the record to support their position; and fail to acknowledge the prevalence of 8YY arbitrage or the harms caused by such arbitrage.

38. We are also unpersuaded by commenters arguing that moving originating end office charges to bill-and-keep would enable IXCs to reap windfall profits. Instead, we agree with GCI that "[e]liminating the implicit subsidies in the current system cannot fairly be described as a 'windfall'; rather, it will incentivize efficient call routing and will benefit the public interest." In fact, the Commission rejected similar arguments when it moved terminating end office charges to bill-and-keep, finding that a significant proportion of interexchange carriers' reduced access expenses were likely to be passed through to benefit consumers. We expect that the cost savings resulting from our new rules will flow through to interexchange carriers' customers, in the form of lower prices or better service or both, and we therefore decline to require interexchange carriers to pass through the benefits they receive as some commenters have suggested.

39. We disagree with Public Knowledge that the approach we take in this document "will allow IXCs to 'double dip' by charging 8YY subscribers fees to own an 8YY number as well as charging LECs that route the 8YY calls" resulting in a "windfall" for interexchange carriers. The rules we adopt in this document do not allow an interexchange carrier to charge a local exchange carrier for originating a call. To the contrary, moving originating 8YY end office charges to bill-and-keep will foreclose *any* carrier's ability to assess those intercarrier charges. Indeed, the premise of bill-and-keep is that carriers rely on their own end users, rather than other carriers, to recover their costs. At the same time, 8YY providers will continue to be responsible for the long-distance charges for calls placed to their 8YY numbers.

40. There is also no reason to believe that moving 8YY end office access charges to bill-and-keep will lead to an appreciable increase in rates for local service. As Ad Hoc points out, "in wireless markets, the bill-and-keep framework has been in place for years and no separate, toll free specific charges have been imposed on callers." In fact, charges for wireless calling plans declined even as access charges for wireless calls moved to bill-and-keep. There is no reason to expect a different outcome here.

41. Relatedly, we are unpersuaded by commenters' unsupported assertions that moving to bill-and-keep will somehow hamper rural local exchange carriers' ability to meet the broadband needs of their customers. Our rules provide a revenue recovery system for lost interstate 8YY revenue for the rate-of-return local exchange carriers and we leave it to the states to handle the substantially smaller impact on intrastate 8YY revenue. Furthermore, as important as we find broadband deployment, we continue to reject the suggestion that we should preserve inefficiencies in our intercarrier compensation regime to implicitly subsidize carriers' efforts to deploy broadband.

42. Contrary to the views expressed by some commenters that appear to profit as middlemen in the existing intercarrier compensation regime, we find that interexchange carriers' customers, and consumers in general, will benefit from our efforts to address 8YY abuses. By reducing the incentives for local exchange carriers to engage in 8YY arbitrage, we expect to see a reduction in, or elimination of, such arbitrage. As AT&T points out, bill-and-keep "shifts originating costs to end user charges, where they can be disciplined by competition." This will result in inflated costs being "competed away, which will make the overall system more efficient and permit 8YY calling to occur at efficient (and still robust) levels."

43. The reforms we adopt here do not alter the fact that the toll portion of an 8YY call will still be paid by the called party, not the calling party, thereby preserving the *toll free* nature of 8YY calls. Thus, arguments by some parties that 8YY calls would no longer be "free" with the imposition of bill-and-keep are misplaced. For the same reason, we find that concerns that Teliax and others have raised about potential false advertising claims related to 8YY calling are groundless; the calls will remain toll free to consumers even after this *Order* takes effect. It is also worth noting that consumers have always paid for service from their local provider as a component of any toll free call.

44. With respect to issues of self-help that some commenters have raised, we reiterate our previous statements cautioning parties to be mindful of "their payment obligations under the tariffs and contracts to which they are a party." We continue to discourage providers from engaging in self-help except to the extent that such self-help is consistent with the Communications Act of 1934, as amended (the Act), our regulations, and applicable tariffs. Disallowing self-help, whether in the access stimulation context or not, would be inconsistent with existing tariffs, some of which permit customers to withhold payment under certain circumstances.

45. *Transition*. We find that the multiyear transition period that we adopt for moving originating 8YY end office access charges to bill-and-keep "affords a reasonable period [for carriers to] make adjustments" to reduce these rates to bill-and-keep. We amend §§ 51.907 and 51.909 of our rules to effectuate this transition for price cap and rate-of-return carriers and rely on the application of the existing benchmark requirements in §§ 51.911(c) and 61.26 of our rules to apply this same transition to tariffed rates charged by competitive local exchange carriers. We begin by capping all intrastate and interstate originating 8YY end office rates that are not already capped as of the effective date of this *Order*. Next, we require carriers to bring their intrastate originating 8YY end office rates that exceed their interstate originating 8YY end office rates into parity with their interstate rates as of July 1, 2021. In doing so, we "balance the importance of starting the first step of reform as quickly as possible with the practical realities that billing system implementation and tariff revisions" will take some time. This step of our transition provides a "gradual rate reduction of intrastate to interstate charges," followed by a 12-month period before the next rate reduction to enable carriers to "appropriately adjust and phase in revenue changes." Additionally, these rate reductions and those scheduled for July 1, 2022 and July 1, 2023 are timed to coincide with annual access tariff filing dates, minimizing administrative burdens on filing

entities and on the Commission. The transition period exceeds the two-year transition for originating 8YY access rates on which the Commission sought comment in the *USF/ICC Transformation FNPRM*. It also closely parallels the transition proposed in the *8YY FNPRM* by reducing rates in three steps over a three-year transition. Several commenters support transitions of similar duration, and we find that a three-year transition with rate changes tied to the annual access tariff filings benefits both carriers and consumers.

46. Some commenters advocate for a shorter transition period, or even for no transition at all. They suggest that the costs of 8YY arbitrage are significant enough to justify a more rapid transition. However, we find that allowing no transition or only a single year would not give providers adequate time to adapt their business plans to accommodate the move to bill-and-keep. Other commenters argue for a longer transition, some as long as the transition provided to move terminating end office charges to bill-and-keep. We agree, however, with those commenters that argue that a six- or nine-year transition, like the one the Commission adopted for terminating end office access charges, would inappropriately "perpetuate incentives for the originating . . . carriers involved to engage in traffic pumping and other arbitrage schemes," and "allow perpetrators of fraud and traffic pumping to eke out [additional] years of access revenues." In 2011, transitioning to bill-and-keep was a relatively untested concept. By now, carriers have had over eight years to adapt to bill-and-keep and have successfully accomplished that transition for terminating end office rates. Carriers have also been on notice since at least 2011 that the Commission plans to move all intercarrier compensation to bill-and-keep. The multiyear transition we adopt today for originating access charges means that carriers will have had eleven years to prepare for the elimination of 8YY originating end office rates. We find that the transition period we adopt strikes the appropriate balance between providing carriers adequate lead time to adjust to the new rules, "while still moving quickly to the desired end state of bill-and-keep."

47. Our decision is also influenced by the fact that the revenues affected by this *Order* are likely to be smaller than those affected as a result of the *USF/ICC Transformation Order*. In the *USF/ICC Transformation Order*, the Commission reduced most terminating intrastate rates to interstate rates, capped most originating intrastate and interstate charges for price cap carriers and originating interstate charges for rate-of-return carriers at 2011 levels, and reduced carriers' Eligible Recovery by 10% annually for price cap carriers and 5% annually for rate-of-return carriers. By contrast, according to

NTCA estimates, rural local exchange carriers' (RLECs) total originating 8YY access revenues for the 12 months from July 2019 through June 2020 were approximately $30.3 million. In addition, the record shows that while 8YY arbitrage has increased in recent years as a percentage of originating traffic, overall originating traffic and therefore originating access revenues have declined. Thus, we find that moving originating end office access charges for 8YY calls to bill-and-keep will have a smaller relative impact on carriers than did the rules the Commission adopted in the *USF/ICC Transformation Order*. Accordingly, we find that a multiyear transition ending July 1, 2023 is reasonable for moving originating 8YY end office charges to bill-and-keep.

F. Adopting a Joint Tandem Switched Transport Access Service Rate Cap for Originating 8YY Traffic

48. Next, to reduce incentives for arbitrage with respect to 8YY originating tandem switching and transport rates while preserving the role of independent tandem providers, we move rates for these services toward bill-and-keep by adopting the proposal made by USTelecom that we impose a single nationwide tariffed joint tandem switched transport access service rate cap of $0.001 per minute for originating 8YY traffic. We amend §§ 51.907 and 51.909 of our rules to effectuate this transition for price cap and rate-of-return carriers and rely on the application of the existing benchmark requirements in §§ 51.911(c) and 61.26 of our rules to apply this same transition to tariffed rates charged by competitive local exchange carriers. In the interest of reducing administrative burdens, we allow carriers to implement any necessary changes as part of their next set of annual tariff revisions, and make the cap effective July 1, 2021. To prevent gamesmanship in the interim, we cap all intrastate and interstate originating toll free tandem switching and transport rates at their current levels as of the effective date of this *Order*.

49. Although the Commission proposed moving these rates to bill-and-keep in the *8YY FNPRM*, we agree with commenters that doing so at this stage would leave uncompensated those intermediate providers that do not serve end customers. We remain committed to moving all intercarrier compensation to bill-and-keep and by taking this interim step toward that goal, we leave for further consideration questions of the network edge and how intermediate providers will be compensated when we reach a full bill-and-keep-regime. Allowing carriers to charge for tandem switching and transport service under a uniform nationwide rate cap will preserve independent tandem service providers' role in

routing originating 8YY traffic until we complete the transition of these rates to bill-and-keep.

50. In the meantime, we find that instituting a single uniform tandem switching and transport rate cap "will immediately remove the largest incentive to create [8YY] arbitrage schemes." Because originating carriers and intermediate providers currently charge interexchange carriers for transport on a distance-sensitive, per-minute, per-mile basis, they have an incentive to engage in "mileage pumping, inefficient routing and aggregation of 8YY traffic to high rate areas." AT&T, for example, describes mileage pumping schemes in which "a CLEC tariffs a per-mile charge for transport and then either (i) bills the IXC for transport it does not actually provide . . . or (ii) inefficiently routes traffic long distances––sometimes more than a hundred miles—to inflate the number of miles applied to the per-mile transport charge." As Verizon explains, "as long as 8YY tandem-switched transport rates remain high, and continue to vary from LEC to LEC, there will be strong incentives for carriers to engage in such arbitrage schemes." We agree with USTelecom that, because "the lack of uniformity in current rate structures tend[s] to distort the market by incenting 8YY call origination and aggregation in remote areas," setting a nationwide cap on originating 8YY tandem switching and transport rates will reduce 8YY arbitrage, particularly abuses related to 8YY benchmarking. Although they do not necessarily agree with the level of the rate cap, several intermediate providers agree that we should cap the rate for tandem switching and transport. Inteliquent, for example, "emphasized its agreement with USTelecom that the Commission should adopt a nationwide tandem rate to address any abuses in tandem charges assessed for 8YY-related costs."

51. In addition to eliminating incentives for 8YY benchmarking and mileage pumping, a single nationwide tandem switching and transport rate cap for 8YY traffic constitutes another transitional step in the process of achieving the Commission's longer term goal of moving all intercarrier compensation to bill-and-keep. Furthermore, if we transition 8YY originating end office charges to bill-and-keep without also taking action to begin the transition of originating 8YY tandem switching and transport charges toward bill-and-keep by reducing those rates, we could create incentives for carriers to shift the focus of their 8YY arbitrage schemes to tandem switching and transport charges. Such a shift would not be unlike the shift in arbitrage practices that occurred when the Commission moved terminating end office rates to bill-and-keep but left certain terminating tandem switching and transport rates in place.

52. We agree with commenters that it is premature to move originating toll free tandem switching and transport charges to full bill-and-keep, as proposed in the *8YY FNPRM*. As commenters including AT&T, CenturyLink, and independent tandem providers argue, because intermediate tandem providers generally do not serve end-user customers, moving tandem switching rates to bill-and-keep—which is premised on carriers obtaining compensation from their end users—could strand them without a clear source of revenue. Commenters observe that the result could be to "disincentivize investment in tandem facilities," and "limit[] the benefits tandem services provide to the entire public switched network." We agree that independent tandem services add important "network redundancy and alternative routing options," and "are a fundamental component of today's telecommunications network." Mindful of the importance of these attributes, our institution of an interim national rate cap retains "an IXC payment obligation for tandem functionality utilized for originating 8YY traffic," and preserves independent tandem providers' ability to receive compensation for the services they provide.

53. Some parties claim that today's reforms will shift financial incentives to engage in 8YY traffic stimulation to interexchange carriers, or allege that interexchange carriers are responsible for the increase in access charges they must pay because IXCs have encouraged their 8YY customers to increase their use of toll free services. These assertions are unsupported by the record. Commenters provide no explanation as to how interexchange carriers either drive or would engage in such arbitrage, nor do they offer any evidence that such schemes exist. These commenters also fail to acknowledge that by moving 8YY end office charges to bill-and-keep and moving to a uniform nationwide tandem switched transport access service rate cap, we reduce incentives for *all* carriers to engage in 8YY arbitrage.

54. FailSafe Communications, Inc., (FailSafe) requests that we provide an indefinite exemption from bill-and-keep for 8YY access traffic associated with small and medium-sized business end users with less than 24 phone lines, arguing that the "loss of the [carrier access billing] contribution" would upset its current business model targeted at small and medium-sized businesses. We do not find that such an exemption is justified. FailSafe fails to recognize that to the extent that its clients are the recipients of 8YY calls, they will benefit from lower access prices paid by their 8YY provider. To the extent FailSafe's business model relies on intermediate carriers being paid for tandem switching and transport, we provide a uniform tariffed rate for those services. Furthermore, FailSafe does not offer a justification for the broad waiver it requests for access traffic associated with small and medium-sized

business end users, nor does it explain how such a waiver could be operationalized.

55. We also decline to adopt the alternative proposal the Commission sought comment on in the *8YY FNPRM* that would have imposed mileage limitations on 8YY transport charges and would have transitioned originating 8YY tandem switching and transport rates to bill-and-keep, but only where the "originating carrier also owns the tandem." There is no basis in the record for treating some tandem and transport providers owned by originating providers differently than independent tandem providers. Further, this proposal would allow abuse by independent tandem providers to continue unchecked.

56. Upon review of the record, we now reject proposals to impose specific distance-based mileage caps such as a ten-mile flat distance cap, mileage limits that "vary by the type of market," or a cap based on the "shortest practicable direct route." We find these and other suggestions in the record concerning tandem switching and transport overly narrow and therefore unlikely to be as successful in curtailing abuse as adopting a single, uniform rate cap. Any attempt to cap just 8YY transport mileage would only create incentives to abuse other aspects of the rate. In addition, commenters that recommend a mileage cap have provided insufficient data to allow us to determine the appropriate distance for a mileage cap, if we were to adopt one. Alternatively, ITTA recommends that we require competitive local exchange carriers to benchmark tandem and transport rates to the "charges of the ILEC in the market where 8YY traffic originates." We find this approach would be administratively burdensome and potentially unworkable given the difficulties inherent in determining "where [an 8YY] call originates," difficulties that will only increase with the evolution of new technologies.

57. Instead, we find that the most workable interim solution to addressing arbitrage of toll free tandem switching and transport rates in connection with intercarrier compensation for 8YY traffic is to set a single nationwide joint tandem switched transport access service rate cap of $0.001 per minute as an interim step toward moving these services toward bill-and-keep. USTelecom proposes this rate as part of its consensus proposal and states that this rate "would address negative incentives that currently exist in the market while allowing legitimate cost recovery and providing a level competitive playing field for all market participants." USTelecom explains that "$0.001 remains an 'above cost' rate'" and that "rates at and below $0.001 exist today and CLECs currently provide service in those areas at those rates due to the ILEC benchmarking rule." According to USTelecom, a rate of $0.001 per minute is approximately at the midpoint of rates currently assessed by its larger members. In addition, USTelecom members that own

tandem switches "agree to provide service at this rate" and find no reason to charge higher existing rates given their agreement.

58. Bandwidth, a facilities-based competitive local exchange carrier that operates an interexchange network to provide 8YY service, agrees with the USTelecom proposal, explaining that, in Bandwidth's experience "without revenue sharing, a tandem charge of $0.001 should be sufficient to recover an IP tandem provider's costs of delivering the traffic to the [Responsible Organization]." According to Bandwidth the $0.001 per minute rate "is likely high enough to enable a revenue share of $0.0005-7," suggesting that costs to provide tandem switching may in fact be lower than $0.001 per minute. As Bandwidth also explains, adopting a higher rate could retard the transition to IP networks by perpetuating a high rate for TDM switching. Indeed, although independent tandem providers may be more reliant than other carriers on revenues from these services, their filings in the record of this proceeding also make clear that they rely principally on lower-cost IP-based switching and transport to provide service and are therefore likely to have lower costs than carriers that operate legacy TDM-based networks. Given this record evidence, we find that a cap of $0.001 per minute will allow carriers, including intermediate tandem providers, a reasonable level of compensation for providing 8YY tandem switching and transport services as we transition all 8YY access rates ultimately to bill-and-keep. Allowing carriers to charge as much as $0.001 per minute for tandem switching and transport also addresses concerns that intermediate providers would not receive compensation for 8YY traffic routed over their networks. Given the support for a uniform nationwide rate cap in general, particularly from intermediate providers such as Inteliquent and Bandwidth, we concur that a uniform cap is suitable, notwithstanding the potentially variable nature of transport service.

59. Unsurprisingly, even among carriers that support a uniform rate cap, not all carriers support the $0.001 per minute rate for joint tandem switched transport access services. In particular, Inteliquent proposes a nationwide uniform rate cap of $0.0017 per minute, which it describes as a national average tandem usage rate it calculated using its own internal traffic data. Inteliquent claims its proposed rate is "based on those charged by the largest ILECs, which in turn were based originally on cost studies." Yet, Inteliquent fails to acknowledge that those cost studies are almost three decades old and, given the generally declining costs of providing telecommunications service, those dated cost-based rates almost certainly overstate carriers' current costs. Moreover, the fact that a broad consensus of USTelecom

member companies is willing to accept a lower rate would appear to confirm that Inteliquent's average rate is unlikely to reflect the USTelecom member companies' current costs. Inteliquent also argues that "picking an arbitrary, unweighted number that might be sufficiently compensatory to *some* carriers in *some* circumstances is not a form of 'averaging'" accepted by courts. But, of course, there is nothing arbitrary about the rate cap of $0.001 that we adopt.

60. Inteliquent's preferred approach, however, would be the adoption of a higher rate cap of $0.002814/minute that would include tandem switching, transport, and what it refers to as "dedicated tandem charges" as the "best method" to avoid harming competitive tandem providers like Inteliquent. Our rules governing tandem-switched transport access services currently exclude flat rated charges for transport of traffic over dedicated transport facilities. We similarly exclude such dedicated charges from the rules we adopt here for joint tandem switched transport access services. The Commission sought comment on the possible inclusion of "fixed charges" in the *8YY FNPRM* but, apart from Inteliquent's suggestion, the record is devoid of any discussion of the potential implications of including dedicated transport services in our rate cap. Inteliquent's claim that if we do not incorporate dedicated tandem charges into the uniform tandem switching and transport rate, incumbent LECs will simply increase the rates for those charges is misplaced. Those charges were capped by the *USF/ICC Transformation Order* at their 2011 levels, with the exception of rate-of-return carriers' intrastate traffic, which represents a small minority of all 8YY traffic. We also have some concern that setting a toll free tandem switching and transport rate cap inclusive of dedicated transport charges could overcompensate at least some competitive tandem providers. If, as Inteliquent explains, dedicated tandem charges are "disproportionally levied by incumbent LECs," then adopting a higher unified rate for tandem switching, transport and dedicated transport would offer a windfall to the competitive carriers that do not typically charge for those services and increase, rather than decrease, the cost of 8YY services. As we continue to proceed incrementally in the implementation of bill-and-keep for 8YY traffic, we will monitor the impact of this *Order* on toll free dedicated transport charges and will revisit the issue if our actions in this *Order* adversely impact competition for these services.

61. After careful review of the record, we find that a rate cap of $0.001 will reasonably compensate providers for tandem switching and transport access services while we consider how best to move all intercarrier compensation to a bill-and-keep regime. As we make that transition, there is no

legal requirement that we establish purely cost-based rates. The rate cap we adopt here is not intended primarily to reflect carriers' costs but is instead intended to ensure a reasonable transitional rate as part of our transition of originating toll free tandem switching and transport rates to bill-and-keep. The Commission has previously delineated the merits of bill-and-keep as a rate methodology and affirms those benefits here. Carriers that believe this cap provides insufficient revenue recovery may seek a Total Cost and Earnings Review provided for in this *Order*.

62. *Implementation*. To achieve this nationwide uniform cap, effective July 1, 2021, we require that tandem providers eliminate existing tandem switching charges and transport charges for originating 8YY traffic, and instead subsume charges for both tandem switching and transport into a single joint tandem switched transport access service rate element not to exceed $0.001 per minute. The new rate structure we adopt will compensate the tandem provider for the use of its facilities whenever it provides either or both elements of a joint tandem switched transport access service. We find that requiring carriers to combine their tandem switching and transport rates into a single per minute rate element is "simpler to implement" than an approach that keeps the two separate, reducing the burden on carriers that must implement the new rules.

63. To give tandem providers adequate time to implement our rate cap, we require carriers to file tariffs that comply with the interim rate cap for originating 8YY tandem switching and transport rates effective July 1, 2021. We find that this period of time provides carriers with a reasonable timeframe in which to transition their rates to the $0.001 per minute cap, and allows for implementation of necessary changes to billing systems and the filing of required tariff changes as part of carriers' annual tariff revisions. At the same time, to avoid gamesmanship before July 1, 2021, we cap all existing toll free tandem switching and transport rates as of the effective date of this *Order*.

64. A longer transition, such as the one we adopt for moving originating 8YY end office charges to bill-and-keep, is unnecessary in this instance because tandem switching accounts for a smaller proportion of total originating access charges, and carriers will still be able to charge intercarrier compensation for toll free tandem switching and transport and will not need to find alternative sources of revenue for their tandem switching and transport costs during this transition. Adopting a longer transition, on the other hand, would unnecessarily prolong carriers' incentives to engage in 8YY arbitrage and could delay carriers' transition to IP-enabled services.

65. *Network edge*. In response to a request in the *8YY FNPRM* for comment on whether a distinct approach to determining the network edge is necessary in the 8YY context, T-Mobile proposes that we require carriers to interconnect at “no more than a few dozen POIs for the entire country” instead of at “hundreds, or even thousands of POIs across the country.” It describes existing interconnection arrangements as an inefficient system that is “slowing the transition from legacy transmission platforms and services to those based fully on Internet Protocol.” NTCA opposes the T-Mobile proposal, claiming that “the shift of all financial responsibility to RLECs serving relatively small customer bases in remote rural areas for transport to reach distant points would undermine universal service and the ability to maintain reasonably comparable rates.” NTCA also argues that “moving from existing network edges would introduce a much greater degree of uncertainty and exacerbate the potential for confusion or disruption as underlying network technologies change.” We decline to implement T-Mobile’s proposal in this proceeding. Mandating such fundamental changes to carriers’ interconnection obligations would have unpredictable consequences for a wide range of interconnection arrangements and are best dealt with in a comprehensive fashion in the separate proceedings where the Commission previously sought comment on issues relating to intercarrier compensation and the network edge.

66. GCI proposes a four-part plan for determining the default network edge for 8YY traffic in Alaska. But the record does not provide any information on the financial implications of its proposal for other Alaska carriers or the impact of its proposal on carriers’ network build-out and rates, let alone provide other parties sufficient opportunity to comment on its financial or operational implications. All of which underscores the need to address GCI’s proposal in the broader context of our network edge proceeding. We therefore decline to adopt GCI’s proposed approach to the network edge for 8YY traffic in Alaska here.

67. Finally, NTCA raises concerns that if larger providers are no longer responsible for 8YY transport costs, they may attempt to “leverage such changes to demand rearrangement of existing interconnection arrangements and to move the network edges . . . from existing locations in rural areas to points that may be [great distances] from the rural areas where those calls originate or terminate.” Contrary to NTCA’s concerns, although our rules transition 8YY transport and tandem switching access charges incrementally toward bill-and-keep, they do not alter the fact that interexchange carriers and wireless carriers continue to be responsible for those charges. Furthermore, we affirm that nothing we do

in this *Order* is intended to affect or alter existing network edge arrangements. To address NTCA's concerns, it requests that we adopt a default rule specifying that: "(1) the RLECs will be able to choose the point of interconnection in its service area; and (2) in no event will an RLEC be financially responsible for transport of calls beyond its service area." We decline to adopt NTCA's proposal as unnecessary, but at NTCA's request, we take this opportunity to remind all stakeholders that a carrier has no legal obligation to agree to unilateral attempts to change network interconnection points. And, on several occasions the Commission has found that unilateral attempts by a carrier to change its interconnection point with another carrier that results in increased costs or inefficient routing of traffic is unjust and unreasonable under section 201(b) of the Act.

G. 8YY Database Query Charges

68. To continue our transition of all intercarrier compensation to bill-and-keep, to remove the incentive for arbitrage created by the existing wide disparity in rates charged for 8YY Database queries, and to put an end to abuse of the intercarrier compensation system created by multiple carriers charging for 8YY Database queries for a single call, we adopt an interim nationwide cap of $0.0002 per 8YY Database query and limit 8YY Database query charges to a single charge per call to be assessed by the carrier that originates the call (i.e., no double dipping). Finally, we adopt a multistep transition to the rate cap of $0.0002 per query for intrastate and interstate 8YY Database queries to ensure carriers have sufficient time to adapt their businesses to the new rate.

1. Preventing Arbitrage by Capping 8YY Database Query Rates Nationwide

69. In response to the negative incentives created by the wide variety of 8YY Database query charges, and general agreement that there should be a nationwide database query rate, we transition 8YY Database query charges to a single, nationwide rate cap of $0.0002. Current database query rates are widely disparate, ranging from $0.0015 to $0.015 per query, because of the disparities that existed when the Commission capped most 8YY Database query charges as part of the intercarrier compensation reforms it adopted in the *USF/ICC Transformation Order*. Although some commenters suggest that the different query rates may be based in carriers' differing rate structures, none provide examples of those different structures. This high degree of variability in rates strongly suggests that some, possibly many, of these rates do not reflect the costs carriers incur in providing these services, creating opportunities for 8YY arbitrage. Generating 8YY Database query charges has become one of the principal reasons driving

the increase in 8YY arbitrage. Additionally, there is nothing currently stopping more than one carrier in a call path from querying the 8YY Database and charging the interexchange carrier for the query. As a result, database query charges make up a disproportionately high proportion of intercarrier compensation paid by IXCs. AT&T, for example, reports that 8YY Database query charges represent 20% of all of its originating access expenses. As AT&T emphasizes "[t]he cost to perform an 8YY database dip is very low, and therefore one would not expect database query charges to represent such a high percentage of AT&T's overall originating access expense."

70. We are persuaded that a cap of $0.0002 per database query, as proposed by USTelecom, is a reasonable nationwide rate cap and will further our goals of ultimately transitioning all access charges to bill-and-keep, minimizing access costs, and routing 8YY traffic as efficiently as possible. USTelecom describes this rate as "the estimated cost of performing a database dip." Additionally, the fact that this cap represents the "agreed upon amount" by USTelecom's members, which include companies that range from the largest to some of the smallest incumbent local exchange carriers, competitive local exchange carriers, and interexchange carriers, all with widely varying business models and cost characteristics makes it likely that it will be sufficient for carriers to recover their costs.

71. We considered suggestions that we adopt a higher rate cap, including the proposal that we cap database queries at different rates, for example, the "national average" rate of $0.004248 per query. We agree that "the Commission should not adopt a higher cap, such as the national average, because such a cap would simply lock in the excessive, unregulated rates that many carriers charge today," perpetuating opportunities for continued arbitrage.

72. We also considered suggestions that we move 8YY Database query charges to bill-and-keep. As the Commission recognized in the *8YY FNPRM*, "the database query is a cost a LEC must incur in order to route an 8YY call to the proper IXC, either by maintaining its own SCP database or by paying a third-party SCP for the database query." USTelecom agrees that "providers incur costs associated with the [database query] function" and therefore "does not propose to reduce the rate to zero." The payment of a query charge ultimately supports the existence of the 8YY Database, which is essential to competition in the provision of toll free services. That said, such charges nonetheless remain a component part of access charges generally, to which the Commission's commitment to bring all such charges to a bill-and-keep methodology applies. In the interim, as USTelecom explains, by setting the

transitional query rate cap at a low, "near-zero rate" we will remove most incentives to engage in 8YY Database query charge abuse while still allowing carriers to recover their costs. Setting the cap at this level will also ensure that 8YY customers and, ultimately consumers, will not bear the burden of unreasonable query charges. As proposed in the *8YY FNPRM* and consistent with our goal of addressing fraud and arbitrage that affects all 8YY charges, this transition applies to both interstate and intrastate 8YY Database query charges. Carriers that can demonstrate higher costs may seek a waiver of the cap pursuant to the Commission's waiver processes.

2. Adopting a Multistep Transition to the Nationwide Rate Cap

73. To avoid a flash cut in revenue received by carriers for database queries, as proposed by USTelecom, we implement the nationwide rate cap for 8YY Database query charges over a multistep transition period. First, we cap all 8YY Database query charges not previously capped at their current levels as of the effective date of the *Order*. Capping all 8YY Database query rates will serve as an important step in curbing the arbitrage that currently exists for database query charges. It will also prevent carriers from gaming our reform efforts by changing or modifying existing rates in anticipation of the adoption of the first interim query rate for 8YY Database queries.

74. Second, effective July 1, 2021, we cap 8YY Database query rates for each carrier at the national average query rate of $0.004248. (Capped 8YY Database query rates from step one of the transition that are lower than $0.004248 must remain at those lower capped rates.) Several commenters supported setting the initial cap at this level. But, consistent with the USTelecom proposal we make this the second step of the transition. Setting July 1, 2021 as the effective date for this step will allow carriers ample time to prepare to transition higher rates to the cap. We find that adopting an implementation date of July 1, 2021 for this transitional step will ensure that carriers have ample time to reduce the "excessive, unregulated rates that many carriers charge today" and therefore "mitigate this form of arbitrage." Third, effective July 1, 2022, all database query rates will be transitioned half of the way to the final target rate of $0.0002. So, if a carrier's database query rate is capped at $0.004248 in the second step, its cap would be $0.002224 on July 1, 2022. If a carrier's rate cap is below $0.004248, then it will use its capped rate to arrive at its rate effective July 1, 2022. Finally, effective July 1, 2023, carriers may not charge more than $0.0002 for an 8YY Database query.

75. Adopting a multistep, multiyear transition period to implement the 8YY Database query

rate cap is consistent with the prior Commission's actions and will "provide [the] industry with certainty and sufficient time to adapt to a changed regulatory landscape" and help minimize disruption to consumers and service providers. Accordingly, we agree with parties that favor a reasonable transition period to avoid the negative effects that might have resulted from imposing a "flash cut" to the new nationwide cap.

76. Implementation of the database query rate cap and transition will occur through application of amendments to § 51.907 of our rules for price cap carriers, § 51.909 of our rules for rate-of-return carriers, and § 51.911 of our rules for competitive local exchange carriers.

77. Nearly two decades ago, the Commission declined to subject competitive local exchange carrier database query charges to the benchmarking rules because of the dearth of information about such carriers' query charges in the proceeding before it. This proceeding by contrast includes robust discussion of competitive providers' database query charges and we find that given our adoption of a nationwide rate cap for all database query charges, the simplest and most administrable manner to implement that change for competitive local exchange carriers is by applying our benchmark rules to competitive local exchange carrier database query charges. The competitive local exchange carrier benchmark rule in § 61.26 of our rules and the benchmarking requirements for access reciprocal compensation rates in § 51.911(c) of our rules already applies to competitive local exchange carrier interstate charges, except database query charges. We now amend § 51.911 of our rules to make clear that beginning July 1, 2021, a competitive local exchange carrier providing interstate or intrastate switched exchange access services for use in the delivery of a Toll Free Call shall not have a tariffed interstate or intrastate Toll Free Database Query Charge rate that exceeds the rate charged by the competing ILEC.

3. Limiting 8YY Database Query Charges to One Per 8YY Call, to Be Assessed by the Originating Carrier

78. To further reduce the abuse of the 8YY Database query, as of the effective date of this *Order*, we will eliminate double dipping and allow only one carrier in a call path to charge a single database query for each 8YY call. If the originating carrier is unable to conduct the 8YY query or transmit the results of the query, the next carrier in the call path that is able to do so may conduct the single query and assess the charge. We agree with the Toll Free Number Administrator that "multiple dip

charges are unnecessary and increase the cost of a call to a[n 8YY number].” There is broad support in the record for this action, with many commenters agreeing that “there is no legitimate reason why an IXC should be expected to pay for multiple database queries.” We agree that “a single dip could allow [a] call to be correctly routed” and that “routing information should be carried with that call until it is terminated.” Allowing only one query per call will eliminate an obvious source of 8YY arbitrage and encourage efficient routing.

79. In the typical 8YY call path, it is the originating carrier that conducts the query because the query is a necessary prerequisite to routing the call to the proper 8YY provider. Some commenters support allowing the originating carrier to assess the database query charge, while others support allowing the carrier that hands the call off to the 8YY provider to assess the charge. We find that allowing the originating carrier to assess the 8YY Database query charge or, if that carrier is unable to conduct the query or transmit the results of the 8YY query, allowing the next carrier in the call path to assess the charge, is consistent with long-standing industry practice and fosters efficient routing of 8YY calls from their inception. Conducting the database query at the point of initiation of the call, allows the originating carrier and all subsequent carriers in the call path to use the correct call routing information to transmit the call. In contrast, allowing the last carrier that hands the call off to the 8YY provider to assess the query charge would necessarily entail inefficient routing up to the point where the final carrier conducts the query.

80. Commenters suggest that some originating carriers’ networks may lack the requisite signaling functionality to pass the results of an 8YY Database query, necessitating an additional query by the next carrier in the call path. In the very limited instances where an originating carrier cannot pass the results of an 8YY Database query, that carrier is not required to perform a query, and may not charge for an 8YY Database query. In this circumstance, we allow the next carrier in the call path to conduct the query and assess the single charge. Carriers other than the next carrier in the call path after the originating carrier remain free to perform their own database queries but may not assess a charge for them. Not allowing intermediate carriers to assess a second 8YY Database query charge per call should have a *de minimis* impact on those carriers’ bottom lines generally. Although the record does not allow us to quantify the number of carriers that lack these basic signaling capabilities, this likely involves a subset of rural carriers which are likely to serve a relatively small fraction of customers and a similarly

small fraction of 8YY calls overall. Intermediate providers that are affected by this restriction transport such traffic pursuant to voluntary agreements and can decide whether to renegotiate their contractual arrangements. In fact, the record shows that competitive local exchange carriers and interconnected Voice over Internet Protocol providers partner with other providers, including intermediate tandem providers, to perform the database queries needed "to determine the IXC serving the dialed toll free number . . . and then route[] the call to the IXC through an unaffiliated carrier's tandem switch that is interconnected with the serving IXC."

H. Relying on Existing Mechanisms for Revenue Recovery

81. We find that our existing revenue recovery mechanisms are sufficient to facilitate incumbent local exchange carriers' reasonable recovery needs as we move originating 8YY end office charges to bill-and-keep and move to national rate caps for 8YY joint tandem switched transport service and 8YY Database query charges. Consistent with the principles of bill-and-keep, competitive local exchange carriers, which are not subject to prescriptive rate regulation, can decide whether to recover from their end users any revenues they "lose" as a result of this *Order*. Accordingly, we decline requests to adopt new recovery mechanisms specifically tailored to 8YY.

82. The Commission adopted the current rules for Eligible Recovery as part of the intercarrier compensation reforms it undertook in the *USF/ICC Transformation Order*. The Commission designed those rules to enable price cap and rate-of-return carriers to recover a portion of the revenues they lost as terminating end office access rates transitioned to bill-and-keep. Our existing recovery mechanisms reflect "the differences faced by price cap and rate-of-return carriers." Rate-of-return carriers, "which are generally smaller and less able to respond to changes in market conditions than are price cap carriers" require a "greater degree of certainty" in connection with intercarrier compensation reforms. We therefore conclude that it is reasonable and appropriate to rely on these mechanisms here, especially insofar as commenters have not demonstrated that they are unable to recover all or part of their lost revenues through existing federal and state recovery mechanisms and insofar that these mechanisms permit rate-of-return carriers to obtain some recovery from explicit universal service support through Connect America Fund Intercarrier Compensation. As the Commission provided for in the *USF/ICC Transformation Order*, we continue here to provide an opportunity for carriers to request additional support if needed through a petition for a Total Cost and Earnings Review. In addition, carriers retain the

option of seeking a waiver of any provision of the Commission's rules.

1. Rate-of-return carriers

83. Rate-of-return carriers will continue to calculate their Eligible Recovery using the methodology adopted in the *USF/ICC Transformation Order* and pursuant to § 51.917(d) of our rules. The Eligible Recovery calculation will allow rate-of-return carriers to account for most of their total lost 8YY revenues. Because the Eligible Recovery calculation requires rate-of-return carriers to subtract expected interstate switched access revenues from Base Period Revenue, adjusted downward 5% annually, a decline in originating 8YY interstate switched access revenues resulting from the reforms we make today means that less revenue will be subtracted from the adjusted Base Period Revenue. This will increase rate-of-return carriers' Eligible Recovery. Thus, the Eligible Recovery calculation will reflect rate-of-return carriers' lost interstate end office and tandem switching and transport access revenues and allow recovery of those revenues.

84. Consistent with the Commission's rules, and the recommendation of ITTA, WTA, and USTelecom, rate-of-return carriers will continue to recover Eligible Recovery through the same two-step process set forth in the *USF/ICC Transformation Order*: first through the Access Recovery Charge, subject to the current caps, and then through Connect America Fund Intercarrier Compensation, as permitted by the Commission's rules. In the *USF/ICC Transformation Order*, the Commission explained that carriers—especially rate-of-return carriers—likely would not be able to recover all of their lost revenues through Access Recovery Charges alone, given the constraints imposed by our caps on permissible Access Recovery Charges and by the Residential Rate Ceiling. Accordingly, the Commission allowed incumbent local exchange carriers to rely on Connect America Fund Intercarrier Compensation to recover Eligible Recovery that they could not recover through permitted Access Recovery Charges.

85. Consistent with the concept of moving to bill-and-keep, rate-of-return carriers will continue to look first to their end users for recovery through the Access Recovery Charge. Some commenters suggest that we modify the Access Recovery Charge caps for rate-of-return carriers, but do not offer any specifics on how those caps should be modified. Rate-of-return carriers can rely on Connect America Fund Intercarrier Compensation support to recover at least some of the revenues that they cannot recover through their Access Recovery Charges.

86. Rate-of-return carriers will recover any Eligible Recovery permitted by § 51.917(f) of our

rules through Connect America Fund Intercarrier Compensation pursuant to § 54.304 of our rules. We agree with ITTA that using Connect America Fund Intercarrier Compensation support in this manner is consistent with the Commission's mandate under section 254 of the Act to advance universal service through "specific, predictable and sufficient" mechanisms and the Commission's use of universal service funding as a component of prior intercarrier compensation reforms.

87. We conclude that concerns that allowing rate-of-return carriers to continue receiving support from Connect America Fund Intercarrier Compensation will limit the funds available under the Alaska Plan are unfounded. As GCI concedes, the Alaska Plan provides "fixed amounts of support to participating ILECs and CMRS providers in exchange for specific, tailored obligations to deploy broadband over a ten-year period." Nothing we do in this *Order* alters Alaska Plan support. Accordingly, the rules that we adopt today will not "upend the carefully calibrated commitments" made as part of that Plan.

88. Our rules for calculating rate-of-return Eligible Recovery will consider reductions in originating interstate revenue but not any reductions in originating intrastate revenue. Although the recovery mechanism established in the *USF/ICC Transformation Order* adopted a formal mechanism for terminating intrastate revenue recovery for rate-of-return carriers, we adopt a different approach here for several reasons. The hundreds of millions of dollars in rate-of-return carriers' annual intrastate revenues potentially affected by the *USF/ICC Transformation Order*'s reforms dwarf the intrastate revenues at issue here, which NTCA estimates will be approximately $6.5 million per year. Further, even the recovery mechanism in the *USF/ICC Transformation Order* declined to ensure revenue-neutrality, and we are not persuaded to go further here, particularly given the comparatively limited revenues at stake. In addition, in contrast to interstate rate regulation, intrastate revenue recovery largely is a matter of state control, presenting a real risk of over-recovery if we were to establish a formal recovery mechanism for intrastate 8YY origination charges here. For one, many states have granted local exchange carriers a significant amount of flexibility regarding intrastate rates. In addition, in contrast to our regulation of price cap carriers, we have left rate-of-return carriers' intrastate originating access rates uncapped—and continue to do so, except with specific respect to 8YY originating charges as reformed in this *Order*. Furthermore, we anticipate that our reform of 8YY originating charges will reduce billing disputes, leading to some cost savings for local exchange carriers. The record thus does not demonstrate that a

formal recovery mechanism genuinely is needed here for intrastate 8YY origination charges above and beyond the recovery possible under state law.

89. We find it unnecessary to adopt ITTA's proposal to "restart the timeline" of the 5% annual reductions in rate-of-return carriers' Baseline Adjustment Factor or to otherwise adjust the Eligible Recovery calculation for rate-of-return carriers to accommodate our changes to the 8YY access charge regime. ITTA fails to provide a basis for changing the 5% annual reductions which were instituted to approximate the rate of line losses rate-of-return carriers were experiencing at the time of the adoption of the *USF/ICC Transformation Order*. We therefore decline to modify the 5% annual reduction.

2. Price cap carriers

90. Like rate-of-return carriers, we find that price cap carriers should look to the existing rules to determine how to adjust to the changes we make today to our intercarrier compensation system. We decline to adopt the suggestion of some commenters that we revise our Eligible Recovery rules to allow price cap carriers to include 8YY originating access revenues in their Eligible Recovery calculations. Instead, consistent with our move to bill-and-keep, price cap carriers may increase their Subscriber Line Charges or their Access Recovery Charges, to the extent they are otherwise able to do so. There is no compelling evidence in the record that further change to our recovery mechanisms is warranted. In fact, parties have not provided any meaningful data regarding the amount of revenue price cap carriers as a whole derive from 8YY originating access charges, or how such revenues should be considered as part of the Eligible Recovery calculations. Without actionable data regarding the revenues price cap carriers might lose as a result of our reform, and their ability to recover that revenue from their end users absent rule changes, we are unable to justify amending the Eligible Recovery calculation. The Commission has concluded that "[p]rice cap carriers generally are less dependent than rate-of-return carriers on interstate access charge revenues and universal service support, and better able to use various economies of scale to generate cost-saving efficiencies, thereby reducing the relative impact of any revenue reductions." These same considerations lead us to conclude that price cap carriers will be able to accommodate changes in 8YY originating access revenues without the need for new universal service support. We also find that the transitions we adopt for today's reforms will give price cap carriers adequate time to adapt to these changes.

91. We also decline to implement proposals to freeze the annual 10% reduction in the Price

Cap Carrier Traffic Demand Factor or to offset that annual 10% reduction by the amount of revenues lost as a result of our reform of 8YY access charges. Although we sought "quantifiable data or evidence" to help us determine what proportion of originating access revenues are attributable to 8YY calls and, more broadly, the need for originating local exchange carriers to replace the revenues they currently obtain from 8YY-related access charges, parties failed to submit the data we would need to quantify the revenues that price cap carriers might lose as a result of our reforms. Without that data, we are unable to justify amending the Eligible Recovery calculation. Commenters also do not attempt to explain how our reforms to 8YY originating access charges are related to the Commission's mechanism designed to estimate line loss for price cap carriers, which is reflected in the 10% annual reduction. Nor do they claim that the 10% annual reduction has somehow ceased to reasonably predict line loss trends. Furthermore, the 10% reduction is applied only to the revenue reductions included in the Eligible Recovery calculation—required reductions to a price cap carrier's terminating access revenues.

92. We also decline to adopt suggestions by CenturyLink and ITTA that we amend our existing revenue recovery rules to allow price cap carriers to receive Connect America Fund Intercarrier Compensation support to recover revenues lost as the result of today's reform. In the *USF/ICC Transformation Order*, the Commission allowed price cap carriers to seek recovery from Connect America Fund Intercarrier Compensation on a transitional basis and phased out such support over time. The Commission chose to phase out this support for price cap carriers in part because it adopted measures allowing price cap carriers the opportunity to receive additional universal service support through other mechanisms. The same logic applies today. With the new support mechanisms now phased in, there is no basis to revisit the phase-out of Connect America Fund Intercarrier Compensation support "designed to reflect the efficient costs of providing service over a voice and broadband network." Since the adoption of the *USF/ICC Transformation Order*, price cap carriers that have chosen to receive high-cost universal service support have been able to maintain and improve their networks using universal service support they receive through the phased-in Connect America Fund mechanisms apart from the phased-out Connect America Fund Intercarrier Compensation. Therefore, we decline to extend Connect America Fund Intercarrier Compensation support to price cap carriers to recover lost 8YY access revenues at this time.

93. Although we do not adopt a specific revenue recovery mechanism for price cap carriers, we also do not foreclose those carriers from recovering reduced revenues through lawful end-user charges such as the Subscriber Line Charge. Indeed, such end-user recovery is one of the central tenets of bill-and-keep. Some price cap carriers claim they are unable to bill their end users to offset reduced 8YY access charge revenues given the Commission's limits on end user charges. We note, however, that certain price cap carriers' tariffs contain end user charges that are below the Commission's caps on these charges, which would enable a measure of recovery of reduced 8YY revenues.

94. At the same time, we decline proposals to allow price cap carriers to pursue recovery through increases in the caps on Subscriber Line Charges and Access Recovery Charges, or through an increase in the Residential Rate Ceiling. In regulating end-user charges, the Commission has always had to account for important consumer interests, including "ensuring that all consumers have affordable access to telecommunications services." To ensure that increases in end-user charges do "not impact the affordability of rates" the Commission has routinely capped such increases. USTelecom does not provide any justification for its proposed increases of as much as $12 per line per year to the Subscriber Line Charge after two years. Frontier and Windstream fail to justify their proposal for two annual increases of $0.15 per line per month in Subscriber Line Charges for price cap carriers. Windstream offers no data in support of that proposal. Frontier justifies the proposal based loosely on the amount of interstate and intrastate revenue it estimates it would lose should we adopt the USTelecom proposal without any new revenue recovery mechanism for price cap carriers. Frontier's estimates, however, appear not to take into account the extent it can offset 8YY revenue reductions through remaining room under the existing Access Recovery Charge or Subscriber Line Charge caps. Moreover, Frontier's proposal would be applicable to all price cap carriers, and no other price cap carriers have offered data estimating their anticipated revenue losses. The very fact that different parties representing price cap carriers make two such widely varying proposals for Subscriber Line Charge increases in this proceeding underscores the arbitrary and unsupported nature of both proposals. Proposals to increase the caps on Access Recovery Charges are cursory, lack supporting evidence or analysis, and fail to address the impact of such increases on affordability. Because we are concerned about affordability, we reject those proposals and the USTelecom proposal to increase the Residential Rate Ceiling by $1.00 a month to $31.00 per month. USTelecom offers no information to demonstrate that there is a meaningful relationship between the revenue reductions carriers will face as a result of this *Order* and the ability of some carriers to recover

more revenue through Access Recovery Charges should we raise the residential rate ceiling by $1 per month. We also agree with NTCA that USTelecom's proposal to raise the residential rate ceiling makes no sense with respect to rate-of-return carriers which have a different revenue recovery mechanism than price cap carriers. None of these proposals provide an adequate basis for us to adopt industry-wide pricing rules. Absent adequate justification, we are also unable to analyze the potential effects on end users of increases in the Subscriber Line Charge, Access Recovery Charges or the Residential Rate Ceiling and whether the increases and timing are reasonable.

3. Case-by-Case Requests for Additional Revenue Recovery

95. We provide an opportunity for revenue recovery through existing mechanisms to promote an orderly transition in the reform of 8YY originating access charges. As explained in the *USF/ICC Transformation Order*, we do not have a legal obligation to ensure that carriers recover access revenues lost as a result of reform, absent a showing of a taking. In that Order, the Commission established a rebuttable presumption that the revenue recovery mechanisms it adopted would allow incumbent local exchange carriers to earn a reasonable return on their investment and established a "Total Cost and Earnings Review," through which a carrier may petition the Commission to rebut that presumption and request additional support. The Commission identified factors that it could consider in analyzing requests for additional support and predicted that the limited recovery permitted would be more than sufficient to provide carriers reasonable recovery for regulated services, both as a matter of the constitutional obligations underlying rate regulation and as a policy matter of providing a measured transition away from incumbent local exchange carriers' historical reliance on intercarrier compensation revenues to recovery that better reflects competitive markets. Nonetheless, the Commission adopted a Total Cost and Earnings Review to allow individual carriers to demonstrate that this rebuttable presumption is incorrect and that additional recovery is needed to prevent a taking. We take the same approach here and adopt a rebuttable presumption that the existing revenue recovery mechanisms will allow incumbent local exchange carriers to earn a reasonable return on investment. We also continue to make the Total Cost and Earnings Review available to carriers affected by the 8YY originating access reforms we adopt today.

96. To show that the existing recovery mechanisms are legally insufficient, a carrier faces a "heavy burden," and must demonstrate that the regime "threatens the financial integrity of [the carrier] or otherwise impedes [its] ability to attract capital." As the Supreme Court has long recognized, when a

regulated entity's rates "enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed," the company has no valid claim to compensation under the Takings Clause, even if the current scheme of regulated rates yields "only a meager return" compared to alternative rate-setting approaches. We believe that our existing recovery mechanisms provide recovery well beyond any constitutionally required minimum, and we find no convincing evidence in the record that those mechanisms will yield confiscatory results.

97. As we seek to protect consumers from undue rate increases or increases in contributions to universal service funding, we will conduct the most comprehensive review of any requests for additional support allowed by law. Our existing recovery mechanisms go beyond what might strictly be required by the constitutional takings principles underlying historical Commission regulations. Therefore, although our recovery mechanisms do not seek to precisely quantify and address all considerations relevant to resolution of a takings claim, carriers will need to address these considerations to the extent that they seek to avail themselves of the Total Cost and Earnings Review procedure based on a claim that recovery is legally insufficient.

I. The Benefits of Our Actions Far Outweigh the Costs

98. The record is clear that the benefits of the actions we take today to move 8YY access charges toward bill-and-keep far outweigh the costs. By eliminating 8YY arbitrage opportunities based on high and varying originating end office access rates, tandem switching and transport rates, and database query rates, we reduce the incidence of 8YY robocalls, incent more efficient (and therefore lower cost) routing of 8YY calls, and encourage greater competition among 8YY providers on the basis of quality and price.

1. The Benefits of Our Actions

99. Carriers, 8YY customers, and consumers will all benefit from better quality, lower-priced 8YY services as a result of the actions we take to move 8YY charges to or toward bill-and-keep. We conclude that there are at least four ways in which our actions benefit consumers and firms and enhance the public interest. *First*, by transitioning interstate and intrastate end office originating access rates for 8YY calls to bill-and-keep, moving 8YY tandem switching and transport services and database query charges to nationally capped low rates, and limiting database queries to one charge per call, we discourage inefficient routing designed to maximize 8YY access revenues. Consistent with the

Commission's findings in the *USF/ICC Transformation Order*, moving originating 8YY end office access rates to bill-and-keep will move prices closer to being cost reflective and, as a consequence, "carrier decisions to invest in, develop, and market communications services will increasingly be based on efficient price signals." Taken together, these actions will reduce the access charge and network operation costs carriers incur, and will provide better investment incentives. Additionally, reducing 8YY robocalls will mitigate network congestion, lower the costs of access for 8YY providers and help ensure that legitimate callers can reach their intended destinations. We expect some of the carriers' cost savings that will arise from more efficient network use to be passed on to their 8YY customers in the form of better service and/or lower prices. Ultimately, this will lead businesses using 8YY services to provide better service and/or lower prices to their own customers.

100. *Second*, our actions will reduce the 8YY originating access rates paid by interexchange carriers for legitimate 8YY calls. We estimate that originating end office charges for 8YY services exceed $56 million annually, and are possibly many times this. Because of our actions, these end office access expenses will fall to zero over the next three years. Establishing nationally uniform rate caps for 8YY tandem switching and transport charges and 8YY Database queries and reducing the number of queries per call to one will further reduce interexchange carriers' costs of providing 8YY services. These declines in access charges will further lower 8YY prices and/or increase innovation.

101. *Third*, our actions will encourage carriers to efficiently transition to IP services. Under the current system of intercarrier compensation, access revenues can be inflated by inefficiently exchanging traffic over TDM facilities. Reducing those revenues will reduce incentives to route traffic inefficiently and to use TDM facilities which will further encourage the transition to IP services. As the Commission previously found, taking steps to foster the transition to IP-based and other advanced communications technologies "can dramatically reduce network costs and lead to the development of new and innovative services, devices, and applications, and can also result in improvements to existing product offerings and lower prices."

102. *Finally*, our reforms will reduce intercarrier compensation disputes. Carriers will no longer need to devote as many resources to monitor their 8YY call traffic and dispute 8YY invoices. For end office switching, billing will not be necessary. Although some of these benefits are difficult to quantify, together they will be substantial.

2. The Costs of Our Actions

103. The impact of our rule changes on the intercarrier compensation revenue and expenses of carriers will vary by carrier. To the extent one carrier's losses are gains to another, for example, because the amount of access revenue losses on call origination services for one carrier constitute reduced access expenses for another carrier, these changes are transfers, and therefore do not of themselves impact economic efficiency. As such, transfers are not directly relevant to a cost-benefit analysis. In any case, except to the extent that there may be some carriers for which 8YY arbitrage is the core of a narrow business plan, relative to the scale of most carriers' operations, the impact of our action on any carrier's revenues will be small, and we expect carriers may make ameliorating adjustments to their business plans. Despite the fact that some commenters have sought approval to raise their end user charges in conjunction with this rulemaking, we expect that robust competitive pressure for voice services nationwide will limit the extent to which carriers of all types respond to our rule changes by raising their end user charges. In any case, the rule changes will provide more efficient incentives for carriers' pricing decisions, product offerings, and investments.

104. It is possible that small price increases could occur due to our actions. Rate-of-return incumbent local exchange carriers may recover a portion of their lost revenue through a combination of Access Recovery Charges and Connect America Fund Intercarrier Compensation. We estimate that the total Universal Service Fund program collection will increase at most by approximately 0.3% due to our actions. Increases in Access Recovery Charges will be paid by rate-of-return carriers' end user customers and increased Connect America Fund Intercarrier Compensation support will require increases in Universal Service Fund contributions, partially offsetting the benefits of the price declines generated by our actions. The costs of higher contributions arise because they raise prices for end users and hence distort efficient consumption of interstate services. However, we expect this loss of efficiency will be small relative to the benefits our actions will bring, primarily because the inefficiency brought about by higher contribution rates is small relative to the substantial inefficiency created by current 8YY arbitrage, and because the revenue impacts of lower 8YY access charges will only be partially offset by contribution increases. Moreover, meeting universal service obligations from contributions is simpler and more transparent than the existing opaque implicit subsidy system under which carriers pay to support other carriers' network costs through origination charges.

105. We estimate the costs necessary to update the relevant carrier's billing systems to be approximately $6 million. We estimate billing costs as follows. We use a labor cost per hour to implement billing system changes of $70. We estimate the hourly wage for this work to be $47, equivalent to the hourly pay for a General Schedule 12, step 5 employee of the federal government. This rate does not include non-wage compensation. To capture this, we markup wage compensation by 46%. The result is an hourly rate of $68.62 [= $47 x 1.46], which we round up to $70. As many as 859 carrier holding companies may be impacted by our actions. In 2018 on Form 499 filings, 859 holding companies reported non-zero revenue from per-minute charges for originating or terminating calls provided under state or federal access tariff (based on aggregated data from Form 499, line 304.1). These holding companies vary significantly in size and therefore likely face varying costs to implement billing system changes. We assume that at most 100 hours of work is required to adjust billing systems for the largest holding companies and the most complicated systems, and conservatively use that figure as the estimate for every holding company. Thus, our estimate of the costs for billing adjustment is approximately $6 million [= 859 x $70 x 100]. We acknowledge the limits of our attempt to estimate these costs but believe this approach yields a reasonable estimate for the purposes of this cost-benefit analysis.

3. On Balance, Benefits Exceed Costs

106. On balance, the benefits of our actions outweigh their costs. Consumers, 8YY customers, and carriers will benefit as we transition 8YY access charges toward bill-and-keep, reducing the inefficiencies inherent in 8YY arbitrage, lowering 8YY access charges, causing prices of 8YY services to fall and innovation to increase, reducing 8YY congestion, encouraging network modernization, and reducing intercarrier compensation disputes. Our actions will also reduce "competitive distortions inherent in the current system, eliminating carriers' ability to shift network costs to competitors and their customers." There will be some costs imposed, largely due to the need to collect additional Universal Service Fund contributions to fund rate-of-return carriers who face losses in 8YY originating access charges. Nonetheless, the costs of higher retail rates due to any increase in Access Recovery Charges are likely to be *de minimis*, and compliance costs are a small transitional expense. The significant benefits of our actions more than compensate for the necessary, yet small costs they impose.

J. Legal Authority

107. In this *Order* we correct the perverse incentives the current rules create for local

exchange carriers to choose expensive and inefficient call paths for 8YY traffic. We also continue to advance the goals and objectives the Commission articulated in the *USF/ICC Transformation Order* and take further steps toward the Commission's goal of adopting a bill-and-keep regime for all intercarrier compensation.

108. As in the *USF/ICC Transformation Order*, our statutory authority to implement changes to the pricing methodology governing the exchange of traffic with local exchange carriers flows directly from sections 201(b), 251(b)(5), and 251(g) of the Act. Section 201(b) permits us to "prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter," including the provision requiring the "charges, practices, classifications, and regulations" for interstate communications to be just and reasonable. The new rules we adopt in this *Order* will help ensure originating 8YY rates are just and reasonable as required by section 201(b) and should end the abuse of these charges, including the artificial inflation of originating access charges.

109. Section 251(b)(5) specifies that local exchange carriers have a "duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications." In the *USF/ICC Transformation Order* the Commission "br[ought] all traffic within the section 251(b)(5) regime." In finding that it had the authority to comprehensively reform intercarrier compensation and move all interstate and intrastate access charges to bill-and-keep, the Commission explained that its authority to implement bill-and-keep as the default framework for the exchange of traffic with local exchange carriers flows directly from sections 251(b)(5) and 201(b) of the Act. This comprehensive reform approach necessarily includes originating access charges. Indeed, the Commission has long held that the absence of any reference to originating traffic in section 251(b)(5) means that—apart from access charge rules temporarily preserved by section 251(g)—the originating carrier is barred from charging another carrier for delivery of traffic that falls within the scope of section 251(b)(5). Section 251(g) of the Act—which preserves existing "originating access until the Commission adopts rules to transition away from that system"—provides additional legal authority for our regulation of origination charges and our continuation of the measured transition away from historical access charge regimes that the Commission began in the *USF/ICC Transformation Order*. Relying on those sections of the Act, the Commission confirmed that originating charges for all telecommunications traffic should ultimately move to bill-and-keep, but capped interstate and certain intrastate originating access charges in the *USF/ICC*

Transformation Order pending more comprehensive reform.

110. In considering challenges to the *USF/ICC Transformation Order*, the Tenth Circuit held that the Commission's inclusion of originating access charges in its reform effort was "reasonable" and entitled to deference. The Court also expressly affirmed the Commission's authority over intrastate originating access charges. The Commission's authority to take such action for interstate and intrastate originating charges is thus well settled. Arguments that we lack authority over such charges or the methodology that should apply to those charges are entirely without merit.

111. This statutory authority also allows us to establish a transition plan to reform 8YY originating access charges. We agree with CenturyLink that "the Commission can rely on (*inter alia*) sections 4(i) and 201 through 205 of the Act, which together afford the Commission broad discretion in establishing carrier rates." As the Commission concluded in the *USF/ICC Transformation Order*, "although the [Act] provides that each carrier will have the opportunity to recover its costs, it does not entitle each carrier to recover those costs from another carrier, so long as it can recover those costs from its own end users and through explicit universal service support where necessary. We continue this framework today by allowing end user recovery and, where permitted, explicit universal service support.

II. PROCEDURAL MATTERS

112. *Paperwork Reduction Act Analysis*. This document contains modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the 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.

113. In this *Report and Order*, we have assessed the effects of transitioning inter- and intrastate originating 8YY end office and transport rates to bill-and-keep, and of adopting a single national rate for originating 8YY tandem switching and transport charges and database query charges and find that the tariff modifications required by our rules are both necessary and not overly burdensome. We believe that many carriers affected by this *Report and Order* will be small businesses and may employ

less than 25 people. However, we find the benefits that will be realized by a decrease in the problematic consequences associated with 8YY abuse outweigh any burden associated with the changes (such as making tariff or billing revisions) required by this *Report and Order*.

114. *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 this rule is "non-major" under the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of this *Report and Order* to Congress and the Government Accountability Office pursuant to 5 U.S.C. 801(a)(1)(A).

115. *Final Regulatory Flexibility Analysis*. The Regulatory Flexibility Act as amended (RFA) requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this *Report and Order* on small entities. The FRFA is set forth below.

Final Regulatory Flexibility Analysis

116. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *8YY FNPRM* in this proceeding released in June 2018. The Commission sought written public comments on the proposals in the *8YY FNPRM*, including comment on the IRFA. The Commission did not receive comments specifically directed as a response to the IRFA. However, the Commission did receive comments from NTCA–The Rural Broadband Association (NTCA), Iowa Network Services, Inc. d/b/a Aureon Network Services (Aureon), Public Knowledge, and FailSafe Communications, Inc., (FailSafe) relating to small entities. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the *Report and Order* (*Order*)

117. Arbitrage and fraud have a significant and increasing effect that undermines the intercarrier compensation system for 8YY calls. This arbitrage takes on a variety of forms, including traffic pumping schemes generating large numbers of illegitimate calls to toll free numbers, so-called benchmarking abuses where competitive local exchange carriers aggregate other carriers' 8YY traffic to

hand it off to 8YY providers in areas where they can charge higher rates, and "double dipping" schemes where multiple Toll Free Database query charges are assessed when only one is needed. This 8YY arbitrage results in higher costs for 8YY providers and customers alike, and ultimately burdens consumers. Left unchecked, 8YY arbitrage threatens to undermine the broad array of useful toll free services on which consumers, businesses and other organizations commonly rely.

118. In the *Order*, the Commission takes steps to address these problems by, in some cases, reducing and, in others, eliminating, over time, most of the 8YY originating access charges that provide the underlying incentive for 8YY arbitrage schemes, consistent with the Commission's previous commitment to move all intercarrier compensation to bill-and-keep. The Commission moves 8YY originating end office access charges to bill-and-keep over three years, caps 8YY originating transport and tandem switching charges at a combined rate of $0.001 per minute, caps 8YY Database query charges needed to route 8YY calls and transitions these query charges to $0.0002 over three years, and prohibits carriers from assessing more than one query charge per 8YY call. We allow carriers to recover lost revenues from these 8YY access charge reductions to the extent existing mechanisms such as Access Recovery Charges and Connect America Fund Intercarrier Compensation allow. By striking at the root of these practices, we eliminate carriers' incentives to engage in arbitrage for 8YY calls. Our actions reduce the cost of 8YY calling overall, decrease inefficiencies in 8YY call routing and compensation, encourage the transition to IP-based networks, and diminish the frequency and costs of 8YY intercarrier compensation disputes. Additionally, the policies adopted in the *Order* will preserve the value of toll free services for both consumers and businesses.

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

119. No comments were filed in response to the IRFA. However, parties did file comments addressing the impact of proposals in the *8YY FNPRM* on small entities. NTCA, for example, expresses concern that the approach proposed by the Commission in the *8YY FNPRM* would shift financial responsibility to rural local exchange carriers (LECs) serving relatively small customer bases in remote rural areas for transport to reach distant points undermining universal service and maintaining reasonably comparable rates. NTCA urges the Commission to ensure that "any such reforms in the future will not have a negative precedential impact on reasonable cost recovery otherwise and critical universal service objectives." NTCA also raises interconnection and "network edge" issues arising out of a transition to

bill-and-keep. In addition, NTCA expresses concern that a move to bill-and-keep without default interconnection rules could create new opportunities for arbitrage and allow providers to dictate unilateral shifts in "edges" aimed at reducing their relative financial responsibilities for transport and thereby shift such costs instead on interconnecting carriers–and that rural local exchange carriers, serving small rural customer bases, were at particular risk of suffering serious harm from such arbitrage. As set forth in the *Order*, though our rules transition 8YY transport and tandem switching access charges incrementally toward bill-and-keep, interexchange carriers continue to be responsible for the payment of access charges during the transition. In addition, our rules provide a recovery mechanism for rate-of-return local exchange carriers' interstate revenue reduction. Further, we affirm that nothing we do in the *Order* is intended to affect or alter existing network edge arrangements, and as suggested by NTCA, we clarify that unilateral attempts by carriers to change network interconnection points may be unjust and unreasonable in violation of the Act, and carriers have no obligation to agree to such unilateral attempts to change interconnection points.

120. Aureon, a provider of centralized equal access (CEA) service in Iowa, argues that moving tandem switching and transport to bill-and-keep, as proposed in the *8YY FNPRM*, would not be "just and reasonable" under section 201(b) of the Communications Act of 1934, as amended (the Act) because bill-and-keep would amount to "zero compensation" for intermediate access providers that do not serve end users. Our adoption of a universal nationwide rate cap for originating 8YY tandem switching and transport obviates this concern by providing intermediate carriers with a regulated intercarrier compensation rate for 8YY calls, rather than moving to full bill-and-keep at this time. Public Knowledge argues that the increased cost and reduced revenues will make it harder for small rural local exchange carriers to meet the needs of rural customers, and would have a detrimental impact on the digital divide.

121. As explained in the *Order*, however, our rules provide a revenue recovery system for lost interstate 8YY revenue for the rate-of-return local exchange carriers about which Public Knowledge expresses concern and we leave it to the states to handle the substantially smaller impact on intrastate 8YY revenue. In addition, by tying 8YY-related rate changes to annual access tariff filings we minimize the cost of implementing 8YY-related tariff revisions.

122. FailSafe, a provider of disaster recovery telecommunications solutions, for emergency response providers and a wide variety of enterprise customers, argues that "[a]n overly-broad Order

would destroy the only Disaster Recovery option available to millions of [small and medium-sized businesses]. At a minimum, it would price [small and medium-sized businesses] out of a Disaster Recovery/call overflow solution due to loss of the [carrier access billing] contribution" and requests (1) an indefinite exemption from bill-and-keep for access traffic associated with small and medium-sized business end users with less than 24 phone lines and (2) a three-year transition to bill-and-keep for "other services related to emergency communications." As the *Order* explains, to the extent that FailSafe's clients are the recipients of 8YY calls, they will benefit from lower access prices paid by their 8YY provider. To the extent FailSafe's business model relies on intermediate carriers being paid for tandem switching and transport, the *Order* provides a uniform tariffed rate for those services. Furthermore, FailSafe does not offer a justification for the broad waiver it requests for access traffic associated with small and medium-sized business end users, nor does it explain how such a waiver could be operationalized. As to FailSafe's request for a three-year transition to bill-and-keep for some services related to emergency communications, the *Order* provides for a three-year transition to bill-and-keep for all originating 8YY end office access charges.

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

123. 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 for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.

124. The Chief Counsel did not file any comments in response to this proceeding.

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

125. 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 rules adopted herein. 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 which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and

(3) satisfies any additional criteria established by the SBA.

126. *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 here, 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 SBA's 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 30.7 million businesses.

127. 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 2018, there were approximately 571,709 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.

128. 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." U.S. Census Bureau data from the 2017 Census of Governments indicate that 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."

129. *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." The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small.

130. *Local Exchange Carriers*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated for the entire year. Of that total, 3,083 operated with fewer than 1,000 employees. Thus, under this category and the associated size standard, the Commission estimates that the majority of local exchange carriers are small entities.

131. *Incumbent Local Exchange Carriers*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated the entire year. Of this total, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our actions. According to Commission data, one thousand three hundred and seven (1,307) incumbent local exchange carriers reported that they were incumbent local exchange service providers. Of this total, an estimated 1,006 have 1,500 or fewer employees. Thus, using the SBA's size standard the majority of incumbent local exchange carriers can be considered small entities.

132. *Competitive Local Exchange Carriers, Competitive Access Providers, Shared-Tenant Service Providers, and Other Local Service Providers*. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate NAICS Code category is Wired Telecommunications Carriers, and under that size standard, such a business is

small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees. Based on this data, the Commission concludes that the majority of Competitive Local Exchange Carriers, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers, are small entities. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these, an estimated 1,256 have 1,500 or fewer employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. Also, 72 carriers have reported that they are Other Local Service Providers. Of this total, 70 have 1,500 or fewer employees. Consequently, based on internally researched FCC data, the Commission estimates that most competitive local exchange carriers, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities.

133. We have included small incumbent local exchange carriers in this RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not "national" in scope. We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

134. *Interexchange Carriers*. Neither the Commission nor the SBA has developed a small business size standard specifically for interexchange carriers. The closest applicable NAICS Code category is Wired Telecommunications Carriers. The applicable size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated for the entire year. Of that number, 3,083 operated with fewer than 1,000 employees. According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services. Of this total, an estimated 317 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of interexchange service providers are small entities.

135. *Local Resellers*. The SBA has developed a small business size standard for the category of Telecommunications Resellers. The SBA category of Telecommunications Resellers is the closest NAICS code category for local resellers. 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. Under the SBA's size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all of which operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, all of these resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities.

136. *Toll Resellers*. The Commission has not developed a definition for Toll Resellers. The closest NAICS Code Category is Telecommunications Resellers. 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 has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees. 2012 U.S. Census Bureau data show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services. Of this total, an estimated 857 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of toll resellers are small entities.

137. *Other Toll Carriers*. Neither the Commission nor the SBA has developed a definition for

small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable NAICS Code category is for Wired Telecommunications Carriers, as defined above. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. The applicable SBA size standard consists of all such companies having 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to internally developed Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage. Of these, an estimated 279 have 1,500 or fewer employees. Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by the rules proposed in the Notice.

138. *Prepaid Calling Card Providers*. Neither the Commission nor the SBA has developed a small business definition specifically for prepaid calling card providers. The most appropriate NAICS code-based category for defining prepaid calling card providers is Telecommunications Resellers. This 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 networks operators (MVNOs) are included in this industry. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to the Commission's Form 499 Filer Database, 86 active companies reported that they were engaged in the provision of prepaid calling cards. The Commission does not have data regarding how many of these companies have 1,500 or fewer employees, however, the Commission estimates that the majority of the 86 active prepaid calling card providers that may be affected by these rules are likely small entities.

139. *Wireless Telecommunications Carriers (except Satellite)*. This industry is comprised of

establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees. For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1,000 employees or more. Thus under this category and the associated size standard, the Commission estimates that the majority of Wireless Telecommunications Carriers (except Satellite) are small entities.

140. The Commission's own data—available in its Universal Licensing System—indicate that, as of August 31, 2018, there are 265 Cellular licensees that may be affected by our actions. The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service, and Specialized Mobile Radio Telephony services. Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

141. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of $40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of $15 million for each of the three preceding years. The SBA has approved these small business size standards. In the Commission's auction for geographic area licenses in the WCS there were seven winning bidders that qualified as "very small business" entities, and one winning bidder that qualified as a "small business" entity.

142. *Wireless Telephony*. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite). Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees. According to Commission data, 413 carriers

reported that they were engaged in wireless telephony. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had fewer than 1,000 employees and 12 firms had 1,000 employees or more. Thus under this category and the associated size standard, the Commission estimates that a majority of these entities can be considered small. According to Commission data, 413 carriers reported that they were engaged in wireless telephony. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Therefore, more than half of these entities can be considered small.

143. *All Other Telecommunications*. The "All Other Telecommunications" category 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. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry. The SBA has developed a small business size standard for All Other Telecommunications, which consists of all such firms with annual receipts of $35 million or less. For this category, U.S. Census Bureau data for 2012 show that there were 1,442 firms that operated for the entire year. Of those firms, a total of 1,400 had annual receipts less than $25 million and 15 firms had annual receipts of $25 million to $49,999,999. Thus, the Commission estimates that the majority of "All Other Telecommunications" firms potentially affected by our action can be considered small.

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

144. *Recordkeeping and Reporting.* We take definitive steps to address the problems that plague 8YY intercarrier compensation by reducing or eliminating, over time, the intercarrier compensation charges that provide the underlying incentive for 8YY arbitrage schemes. We expect the requirements we adopt in the *Order* will impose some additional compliance obligations on small entities. In the *Order*, the Commission adopts new rules for originating toll free access charges that will involve reduced 8YY originating access charges, the adoption of bill-and-keep, and the adoption of nationwide

rate caps associated with 8YY traffic. Some of the changes involve a transitional period to complete implementation and will require modification of existing tariffs and filing of these tariff revisions. For small entities that may be affected, their compliance obligations may also include certain reporting and recordkeeping requirements to determine and establish their eligibility to receive revenue recovery from other sources as 8YY originating access revenue is reduced. The Commission believes the impacts of reporting, recordkeeping, and/or other compliance obligations on small entities will be mitigated by the greater certainty and reduced litigation that should occur as a result of the reforms adopted.

145. In the *Order*, the Commission moves 8YY originating end office access charges to bill-and-keep over approximately three years, caps 8YY originating transport and tandem switching charges at a combined rate of $0.001 per minute, caps 8YY Database query charges nationwide and transitions these query charges to $0.0002 over approximately three years, and prohibits carriers from assessing more than one query charge per 8YY call. Carriers are allowed to recover lost revenues from these 8YY calls to the extent existing mechanisms such as Access Recovery Charges and the Connect America Fund Intercarrier Compensation allow. By adopting policies that strike at the root of these practices, we eliminate carriers' incentives to engage in arbitrage for 8YY calls, thereby preserving the value of toll free services for both consumers and businesses.

146. The rule changes adopted in this *Order* will require affected carriers to revise their existing tariffs and internal billing systems. More specifically, carriers involved in originating toll free calls will be required to file tariff revisions to remove or revise their existing tariffs. Affected carriers will also need to file tariff revisions to modify toll free originating transport charges as these charges move to bill-and-keep. Tariff revisions will likewise be needed for the three-year transition period to bill-and-keep for toll free end office access charges. Similarly, carriers will need to file tariff revisions to implement the nationwide cap on 8YY Database queries and the three-year transition of these query charges to $0.0002 per query, as well as the rule change that allows only one carrier to assess the toll free database query charge per call. Carriers will also need to make tariff revisions to recover lost revenues from toll free calls to the extent existing mechanisms such as Access Recovery Charges and the Connect America Fund Intercarrier Compensation allow. Nevertheless, the Commission believes that with the changes to originating 8YY access charges and 8YY Database query charges, carriers' recordkeeping burdens may be reduced given the simplification of tariffing and billing that the *Order* entails. In

particular, the three-year transition adopted by the Commission is timed to coincide with the annual access tariff filing dates to minimize the administrative burdens on small entities as well as other entities that are required to make such filings. These changes will require carriers to employ the same types of professional skills they typically employ whenever they file tariffs or make billing changes, including legal, accounting, and/or tariffing expertise.

147. With regard to the internal billing system changes that will be necessary for compliance with our *Order*, the cost of compliance will vary by carrier. Overall, the Commission estimates the costs necessary to update the affected carriers' billing systems will be approximately $6 million. This estimate is conservative since it is based on costs incurred by the largest carrier holding companies and the costs of modification of the most complicated systems. The $6 million industry-wide estimate results in approximately $7,000 of expense per carrier holding company. Since the Commission is not in a position to determine the actual costs for small entities, or for any specific entity for that matter, we have applied our conservative estimate to every holding company that may be impacted by decision. As we mention above, our estimate is based on requirements for the largest carrier holding companies, and thus the actual expense will likely be lower for small entities.

148. Notwithstanding the compliance costs that small entities will incur, on balance the Commission believes the benefits of its actions outweigh their costs. Consumers, 8YY customers, and carriers will benefit as we transition 8YY access charges toward bill-and-keep, thereby reducing the inefficiencies inherent in 8YY arbitrage, lowering 8YY access charges, causing prices of 8YY services to fall and innovation to increase, reducing 8YY congestion, encouraging network modernization, and reducing intercarrier compensation disputes. The "competitive distortions inherent in the current system, eliminating carriers' ability to shift network costs to competitors and their customers," will also be reduced. Thus, the significant benefits of our actions more than compensate for the necessary costs imposed on small entities and other carriers.

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

149. 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 may include (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 and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.

150. As a general matter, actions taken as a result of our actions should benefit small entities as well as other service providers by reducing the inefficiencies inherent in 8YY arbitrage, providing greater regulatory certainty, and moving toward the Commission's goal of bill-and-keep for all access charges. Our tailored approach to allowing carriers different transition timeframes to implement our different rate changes is designed to balance the circumstances facing different carrier types and provide all carriers with the necessary predictability, certainty, and stability to transition from the current intercarrier compensation system.

151. *Transition Periods*. To minimize the impact of the changes to 8YY intercarrier compensation adopted in the *Order* on affected small entities, as well as other affected service providers we adopt multistep transition periods for transitioning originating 8YY end office access rates to bill-and-keep and 8YY Database query charges to no more than $0.0002 for an 8YY Database query. For end office access charges, we initially cap all intrastate originating 8YY end office rates not previously capped at their current levels as of the effective date of the *Order*. This first step will ensure against any rate increases during the transition and will benefit small entities and other service providers by giving parties time, certainty, and stability as they adjust to the changes. Then, effective July 1, 2021, we require all local exchange carriers to bring any intrastate originating 8YY end office access rates that exceed the comparable interstate rates into parity with the comparable interstate rates. After reducing or capping intrastate 8YY end office rates, we will transition all intrastate and interstate originating 8YY end office charges from their capped amounts to bill-and-keep in two equal annual reductions. Effective July 1, 2022, we reduce all originating 8YY end office rates to half of their capped levels. Then, effective July 1, 2023, we reduce all originating 8YY end office rates to bill-and-keep.

152. In a similar fashion, small entities will benefit from the multistep, multiyear transition period to implement the 8YY Database query rate cap. Specifically, small entities will avoid the negative economic effects that might have resulted from imposing a "flash cut" to the new nationwide cap. Our actions which are consistent with prior Commission actions, will provide small entities with certainty and

sufficient time to adapt to a changed regulatory landscape and will help minimize service disruptions. First, we cap all 8YY Database query charges not previously capped at their current levels as of the effective date of the *Order*. Second, we cap 8YY Database query rates for each carrier at the national average query rate of $0.004248 for those carriers whose capped database query rates are not already at or below $0.004248 or the rate capped in step one of the transition, if lower than $0.004248, effective July 1, 2021. This step will allow small entities and other carriers ample time to prepare to transition higher rates to the cap. Third, all 8YY Database query rates will be transitioned halfway to the final target rate of $0.0002. If a carrier's cap rate is below $0.004248, then it will use its capped rate to arrive at its rate effective July 1, 2022. Finally, effective July 1, 2023, carriers will not be allowed to charge more than $0.0002 for an 8YY Database query.

153. While the Commission proposed moving 8YY originating tandem switching and transport rates to bill-and-keep in the *8YY FNPRM*, we instead move rates for these services toward bill-and-keep by adopting a nationwide tariffed tandem switched transport access service rate cap of $0.001 per minute for originating 8YY traffic effective July 1, 2021. This approach avoids the economic hardship for small and other intermediate providers that do not serve end customers, and who would be uncompensated under bill-and-keep. Making the cap effective July 1, 2021 will reduce the administrative burdens for small entities and other carriers by allowing carriers to implement any necessary changes as part of their next set of annual tariff revisions. Further, the Commissions finds the adopted effective date will provide carriers with a reasonable timeframe in which to transition their rates to the $0.001 per minute cap and will allow for implementation of necessary changes to their billing systems. To avoid gamesmanship before July 1, 2021, however, we cap all existing toll free tandem switching and transport rates as of the effective date of the *Order*.

154. The multistep transition periods will allow carriers sufficient time to adapt to our new rules for 8YY calling and to spread the financial impact of these changes over three years. By gradually implementing these changes, we will avoid burdening small entities, and provide small carriers, as well as other carriers, with adequate time to adjust to the new rates, while at the same time minimizing existing arbitrage. We considered adopting shorter transitions or even no transitions as proposed in the record and rejected them because these proposed options would not allow carriers sufficient time to implement the changes we adopt to our system of 8YY intercarrier compensation rules. We also considered proposals in

the record to allow longer transitions but rejected them since they would unnecessarily perpetuate the problem of 8YY arbitrage and the burdens it imposes on all carriers involved in 8YY calling.

155. Finally, as discussed in Section E, we recognize that carriers involved in providing toll free service may need to revise their internal billing systems to reflect the rate changes related to the actions in this *Order* and to file tariff revisions as necessary. Although we believe that internal billing system changes will be not be overly burdensome to make, we reiterate that the transitions we adopt today will ensure that small entities as well as other carriers have sufficient time, predictability, and certainty to transition their tariffs and billing systems to reflect the rates required by our new rules.

Report to Congress

156. The Commission will send a copy of the *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. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the Federal Register.

III. ORDERING CLAUSES

157. Accordingly, IT IS ORDERED that, pursuant to sections 1, 2, 4(i), 201-206, 251, 252, 254, 256, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 201-206, 251, 252, 254, 256, 303(r), 403, and § 1.1 of the Commission's rules, 47 CFR 1.1, this *Report and Order* IS ADOPTED.

158. IT IS FURTHER ORDERED that part 51 of the Commission's rules, 47 CFR part 51, IS AMENDED as set forth in the Final Rules, and that such rule amendments SHALL BE EFFECTIVE thirty (30) days after publication of this *Report and Order* in the Federal Register, except for §§ 51.907(i)-(k), 51.909(l)-(o), and 51.911(e), which contain information collections that require approval by the Office of Management and Budget under the Paperwork Reduction Act. The Commission directs the Wireline Competition Bureau to announce the effective date for those information collections in a document published in the Federal Register after OMB approval, and directs the Wireline Competition Bureau to cause §§ 51.907, 51.909, and 51.911 of the Commission's rules to be revised accordingly.

159. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order*, including

the Final Regulatory Flexibility Analysis, to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

160. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration

List of Subjects in 47 CFR Part 51

Communications common carriers, Telecommunications.

FEDERAL COMMUNICATIONS COMMISSION

Marlene Dortch,

Secretary.

Final Rules

For the reasons set forth above, the Federal Communications Commission amends part 51 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. Effective [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, amend § 51.903 by adding paragraphs (n) through (p) to read as follows:

§ 51.903 Definitions.

* * * * *

(n) *Toll Free Database Query Charge* is a per query charge that is expressed in dollars and cents to access the Toll Free Service Management System Database, as defined in § 52.101(d) of this subchapter.

(o) *Toll Free Call* means a call to a Toll Free Number, as defined in § 52.101(f) of this subchapter.

(p) *Joint Tandem Switched Transport Access Service* is the rate element assessible for the transmission of toll free originating access service. The rate element includes both the transport between the end office and the tandem switch and the tandem switching. It does not include transport of traffic over dedicated transport facilities between the serving wire center and the tandem switching office.

3. Effective [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, amend § 51.905 by revising paragraph (b)(2) and adding paragraph (d) to read as follows:

§ 51.905 Implementation.

* * * * *

(b) * * *

(2) With respect to Transitional Intrastate Access Services, originating access charges for Toll Free Calls, and Toll Free Database Query Charges governed by this subpart, LECs shall follow the procedures specified by relevant state law when filing intrastate tariffs, price lists or other instruments (referred to collectively as “tariffs”).

* * * * *

(d) Beginning July 1, 2021, and notwithstanding any other provision of the Commission's rules in this chapter, only the originating carrier in the path of the Toll Free Call may assess a Toll Free Database Query Charge for a Toll Free Call. When the originating carrier is unable to transmit the results of the Toll Free Database Query to the next carrier or provider in the call path, that next carrier or provider may instead assess a Toll Free Database Query Charge.

4. Delayed until publication of a document announcing the effective date, amend § 51.907 by adding paragraphs (i) through (k) to read as follows:

<u>§ 51.907 Transition of price cap carrier access charges.</u>

* * * * *

(i) *8YY Transition – Step 1.* Beginning July 1, 2021, and notwithstanding any other provision of the Commission's rules in this chapter, each Price Cap Carrier shall:

(1) Establish separate rate elements for interstate and intrastate toll free originating end office access service and non-toll free originating end office access service. Rate elements reflecting fixed charges associated with originating End Office Access Service shall be treated as non-toll free charges.

(2) Reduce its intrastate toll free originating end office access service rates to its interstate toll free originating end office access service rates as follows:

(i) Calculate total revenue from End Office Access Service, excluding non-usage-based rate elements, at the carrier's interstate access rates in effect on June 30, 2020, using intrastate switched access demand for each rate element for the 12 months ending June 30, 2020.

(ii) Calculate total revenue from End Office Access Service, excluding non-usage based rate elements, at the carrier's intrastate access rates in effect on June 30, 2020, using intrastate switched access demand for each rate element for the 12 months ending June 30, 2020.

(iii) If the value in paragraph (i)(2)(ii) of this section is less than or equal to the value in paragraph (i)(2)(i) of this section, the Price Cap Carrier's intrastate End Office Access Service rates shall remain unchanged.

(iv) If the value in paragraph (i)(2)(ii) of this section is greater than the value in paragraph (i)(2)(i) of this section, the Price Cap Carrier shall reduce intrastate rates for End Office Access Service so that they are equal to the Price Cap Carrier's functionally equivalent interstate rates for End Office Access Rates and shall be subject to the interstate rate structure and all subsequent rate and rate structure modifications.

(v) Except as provided in paragraph (i)(2) of this section, nothing in this section allows a Price Cap Carrier that has intrastate rates lower than its functionally equivalent interstate rates to make any intrastate tariff filing or intrastate tariff revisions to increase such rates. If a Price Cap Carrier has an intrastate rate for an End Office Access Service rate element that is below the comparable interstate rate for that element, the Price Cap Carrier may, if necessary as part of a restructuring to reduce its intrastate rates for End Office Access Service down to parity with functionally equivalent interstate rates, increase the rate for an intrastate rate element that is below the comparable interstate rate for that element to the interstate rate in effect on July 1, 2021.

(3) Establish separate rate elements for interstate and intrastate non-toll free originating transport services for service between an end office switch and the tandem switch and remove its rate for intrastate and interstate originating toll free transport services consistent with a bill-and-keep methodology (as defined in §51.713).

(4) Establish separate rate elements respectively for interstate and intrastate non-toll free originating tandem switching services.

(5) Establish transitional interstate and intrastate Joint Tandem Switched Transport Access Service rate elements for Toll Free Calls that are respectively no more than $0.001 per minute.

(6) Reduce its interstate and intrastate rates for Toll Free Database Query Charges to no more than $0.004248 per query. Nothing in this section obligates or allows a Price Cap Carrier that has Toll Free Database Query Charges lower than this rate to make any intrastate or interstate tariff filing revision to increase such rates.

(j) *8YY Transition – Step 2.* Beginning July 1, 2022, and notwithstanding any other provision of the Commission's rules in this chapter, each Price Cap Carrier shall:

(1) Reduce its interstate and intrastate rates for all originating End Office Access Service rate elements for Toll Free Calls in each state in which it provides such service by one-half of the maximum rate allowed by paragraph (a) of this section; and

(2) Reduce its rates for intrastate and interstate Toll Free Database Query Charges by one-half of the difference between the rate permitted by paragraph (i)(6) of this section and the

transitional rate of $0.0002 per query set forth in paragraph (k)(2) of this section.

(k) *8YY Transition – Step 3.* Beginning July 1, 2023, and notwithstanding any other provision of the Commission's rules in this chapter, each Price Cap Carrier shall:

(1) In accordance with a bill-and-keep methodology, refile its interstate switched access tariff and any state tariff to remove any intercarrier charges for intrastate and interstate originating End Office Access Service for Toll Free Calls; and

(2) Reduce its rates for all intrastate and interstate Toll Free Database Query Charges to a transitional rate of no more than $0.0002 per query.

5. Delayed until publication of a document announcing the effective date, amend § 51.909 by adding paragraphs (l) through (o) to read as follows:

<u>§ 51.909 Transition of rate-of-return carrier access charges.</u>

* * * * *

(l) *8YY Transition – Step 1.* As of [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], each rate-of-return carrier shall cap the rate for all intrastate originating access charge rate elements for Toll Free Calls, including for Toll Free Database Query Charges.

(m) *8YY Transition – Step 2.* Beginning July 1, 2021, and notwithstanding any other provision of the Commission's rules in this chapter, each Rate-of-Return Carrier shall:

(1) Establish separate rate elements for interstate and intrastate toll free originating end office access service and non-toll free originating end office access service. Rate elements reflecting fixed charges associated with originating End Office Access Service shall be treated as non-toll free charges.

(2) Reduce its intrastate toll free originating end office access service rates to its interstate toll free originating end office access service rates as follows:

(i) Calculate total revenue from End Office Access Service, excluding non-usage-based rate elements, at the carrier's interstate access rates in effect on June 30, 2020, using intrastate switched access demand for each rate element for the 12 months ending June 30, 2020.

(ii) Calculate total revenue from End Office Access Service, excluding non-usage based rate elements, at the carrier's intrastate access rates in effect on June 30, 2020, using intrastate switched access demand for each rate element for the 12 months ending June 30, 2020.

(iii) If the value in paragraph (m)(2)(ii) of this section is less than or equal to the value in paragraph (m)(2)(i) of this section, the Rate-of-Return Carrier's intrastate End Office Access Service rates shall remain unchanged.

(iv) If the value in paragraph (m)(2)(ii) of this section is greater than the value in paragraph (m)(2)(i) of this section, the Rate-of-Return Carrier shall reduce intrastate rates for End Office Access Service so that they are equal to the Rate-of-Return Carrier's functionally equivalent interstate rates for End Office Access Rates and shall be subject to the interstate rate structure and all subsequent rate and rate structure modifications.

(v) Except as provided in paragraph (m)(2) of this section, nothing in this section allows a Rate-of-Return Carrier that has intrastate rates lower than its functionally equivalent interstate rates to make any intrastate tariff filing or intrastate tariff revisions to increase such rates. If a Rate-of-Return Carrier has an intrastate rate for an End Office Access Service rate element that less than the comparable interstate rate for that element, the Rate-of-Return Carrier may, if necessary as part of a restructuring to reduce its intrastate rates for End Office Access Service down to parity with functionally equivalent interstate rates, increase the rate for an intrastate rate element that is below the comparable interstate rate for that element to the interstate rate on July 1, 2021.

(3) Establish separate rate elements for interstate and intrastate non-toll free originating transport services for service between an end office switch and the tandem switch and remove its rate for intrastate and interstate originating toll free transport services consistent with a bill-and-keep methodology (as defined in §51.713).

(4) Establish separate rate elements respectively for interstate and intrastate non-toll free originating tandem switching services.

(5) Establish transitional interstate and intrastate Joint Tandem Switched Transport Access rate elements for Toll Free Calls that are respectively no more than $0.001 per minute.

(6) Reduce its interstate and intrastate rates for Toll Free Database Query Charges to no more than $0.004248 per query. Nothing in this section obligates or allows a Rate-of-Return carrier that has Toll Free Database Query Charges lower than this rate to make any intrastate or interstate tariff filing revision to increase such rates.

(n) *8YY Transition – Step 3.* Beginning July 1, 2022, and notwithstanding any other provision of the Commission's rules in this chapter, each Rate-of-Return Carrier shall:

(1) Reduce its interstate and intrastate rates for all originating End Office Access Service rate elements for Toll Free Calls in each state in which it provides such service by one-half of the maximum rate allowed by paragraph (a) of this section; and

(2) Reduce its rates for intrastate and interstate Toll Free Database Query Charges by one-half of the difference between the rate permitted by paragraph (m)(6) of this section and the transitional rate of $0.0002 per query set forth in paragraph (o)(2) of this section.

(o) *8YY Transition – Step 4.* Beginning on July 1, 2023, and notwithstanding any other provision of the Commission's rules in this chapter, each Rate-of-Return Carrier shall:

(1) In accordance with a bill-and-keep methodology, refile its interstate switched access tariff and any state tariff to remove any intercarrier charges for all intrastate and interstate originating End Office Access Service for Toll Free Calls; and

(2) Reduce its rates for all intrastate and interstate Toll Free Database Query Charges to a transitional rate of no more than $0.0002 per query.

6. Amend § 51.911 by:

a. Effective [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** adding paragraphs (d); and

b. Delayed until publication of a document announcing the effective date, adding paragraph (e).

The additions read as follows:

§ 51.911 Access reciprocal compensation rates for competitive LECs.

* * * * *

(d) *Cap on Database Query Charge.* A Competitive Local Exchange Carrier assessing a tariffed intrastate or interstate Toll Free Database Query Charge shall cap such charge at the rate in effect on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(e) *Transition of cap on Database Query Charge.* Beginning July 1, 2021, notwithstanding any other provision of the Commission's rules in this chapter, a Competitive Local Exchange Carrier assessing a tariffed intrastate or interstate Toll Free Database Query Charge shall revise its tariffs as necessary to ensure that its intrastate and interstate Toll Free Database Query Charges do not exceed the rates charged by the competing incumbent local exchange carrier, as defined in § 61.26(a)(2) of this chapter.

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