

Decision 00-03-054 March 16, 2000

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service.

Rulemaking 95-04-043
(Filed April 26, 1995)

Order Instituting Investigation on the Commission's Own Motion into Competition for Local Exchange Service.

Investigation 95-04-044
(Filed April 26, 1995)

O P I N I O N

By this decision, we adopt rules to promote efficient number utilization relating to the use of sequential number assignments and minimum usage or "fill" rates that carriers must meet to obtain additional blocks of numbers. We shall initially establish fill rate and sequential numbering requirements for the 310 Number Plan Area (NPA). In a subsequent order, we intend to formulate fill rate and sequential numbering requirements covering other NPAs.

The adoption of rules governing minimum utilization rates is another element in our overall plan formulated in Decision (D.) 99-09-067 to extend the life of the 310 NPA and thus to defer the need for opening another area code as long as possible. Our adopted rules conform with the authority delegated to this Commission in the Federal Communications Commission (FCC) Order adopted September 15, 1999 (CC Docket No. 96-98).

By an Administrative Law Judge's (ALJ) ruling dated November 15, 1999, comments were solicited concerning the use of an 80% fill rate, as proposed by the Commission staff in comments before the FCC. We also solicited comments

as to what restrictions and conditions may be warranted concerning prescribed fill rates and rules for sequential number assignments for the 310 NPA as a basis to promote efficient utilization and to preserve existing 1,000-number blocks for the pooling trial.

Comments were filed on November 30, 1999, with reply comments filed on December 7, 1999. Responsive comments were submitted by Pacific Bell (Pacific); GTE California Incorporated (GTEC); AirTouch Communication, Inc. (AirTouch); jointly by Pac-West Telecom Inc., Nextlink California, Inc., and MediaOne Telecommunications of California, Inc. (Pac-West et al.); jointly by MCI Worldcom Inc. (MCI); AT&T Communications, Inc. and Sprint Communications, Company L.P. (MCI et al.); and RCN Telecom Services (RCN).

Minimum Fill Rates

Parties' Position

Parties express divergent views concerning what fill rate standard, if any, may be appropriate, and how it should be applied. MCI et al. oppose the adoption of any fill rate criteria, arguing that use of any mandatory fill rates would create a unfair disparity, leaving new entrants with much smaller inventories of numbers than an established service provider with more NXX codes in a particular area. For example, applying a 50% fill rate for a 10,000-number block, a new entrant with one NXX code would have only 5,000 numbers whereas an established carrier with five NXXs would have 50,000 numbers. MCI et al. argue that the Commission can promote efficient use of numbers without creating such a disparity by relying on the previously adopted months-to-exhaust criterion for carriers to qualify for growth codes, and if needed, by shortening the current six-months-to-exhaust inventory criterion. MCI et al. also claims that because mandatory fill rates have no impact on

requests for initial codes, which are the primary cause of code exhaustion, fill rates ultimately would not contribute meaningfully to code conservation.

If the Commission nonetheless adopts a fill rate threshold, MCI et al. propose a "hybrid" approach that applies a fill rate threshold in conjunction with a months-to-exhaust standard. The MCI et al. proposal incorporates what they consider the best aspects of other parties' proposals as well as procedures in effect in other states. Under this proposal, a carrier could obtain numbering resources for growth purposes for a given rate center only when:

- (1) at least 75% of the carrier's assigned numbers in a particular rate center were "unavailable for assignment" and the carrier can demonstrate that it meets a nine-months-to-exhaust criterion; or
- (2) the carrier has not reached the minimum utilization rate, but can demonstrate a bona fide need for numbering resources, defined using a six-months-to-exhaust criterion.

MCI et al. also propose that carriers be permitted to request numbering resources for "special services" that require separate blocks of numbers such as "calling-party-pays" or priority codes for the Federal Emergency Management Agency.

Most parties argue that an 80% fill rate is too high for carriers to meet customer demand. Parties raise concern that if carriers are left with only 200 unassigned numbers within a 1,000-block, they may not be able to meet the customer demand, especially when a single business could easily order those 200 numbers. Pacific believes a 70% fill rate would be more appropriate. Pac-West et al. argues in favor of a 50% fill rate in order to provide carriers enough flexibility to obtain additional blocks of numbers on a timely basis to meet customer needs. Pac-West et al. believes the 80% fill rate would only be viable if

it were applied on a six-month forward-looking basis, qualifying the carrier to obtain additional numbers if it expects to attain at least an 80% fill rate in that rate center's existing number blocks within the following six months.

AirTouch recommends the fill rate be applied to NXX codes by rate center, but should not be applied to all NXX codes held by a carrier within the NPA. If a fill rate applied on a full NPA basis, a carrier could be denied a NXX code in one rate center within an NPA where such a code is needed simply because the carrier has numbers available to it in a different rate center within the NPA. Pacific assumes that the fill rate criterion would be applied to individual 1,000-number blocks since the 310 NPA will be using 1,000-number pooling.

Parties also raised the issue of what categories of numbers should be treated as "used" for purposes of computing the fill rate. RCN raises the question of whether carriers should count reserved numbers or numbers allocated to resellers and dealer pools as utilized for purposes of the fill rate computation. Within a prefix in a given rate center, AirTouch recommends that assigned and aging numbers be included in calculating fill rates as these reflect current utilization.

AirTouch recommends that non-Local Number Portability (LNP) carriers should not be required to report fill rates at this time since they are not currently eligible to participate in 1,000-block pooling.

Discussion

We conclude that minimum fill rates should be adopted for the 310 NPA as one means to help assure that number resources are utilized as efficiently as possible. We acknowledge that fill rates, by themselves, will not solve all numbering problems. Mandatory fill rates, however, can serve a useful role in

conjunction with the other measures as one element in our arsenal of tools to promote more efficient use of numbering resources.

Imposing minimum fill rates as a condition for receiving additional blocks of numbers will provide needed discipline to help ensure that previously issued blocks of numbers have been efficiently utilized before additional blocks are assigned. Without a fill-rate requirement, there is increased risk that a carrier may be able to obtain more number blocks or NXX codes than may be necessary to meet current needs, thereby unduly accelerating NXX code exhaustion.

Parties disagree about the appropriate fill rate level. The higher we set the fill rate threshold, the greater the efficiency with which blocks of numbers will be used. Yet, as argued by various parties and as cautioned by the FCC, if fill rates are set too high, carriers run a higher risk of prematurely depleting their reserves of numbers to meet customer demand before additional blocks of numbers could be obtained. It can take approximately 21 days for a LNP capable carrier to actually receive numbers through number pooling after requesting the numbers from the pooling administrator. In the case of non-LNP-capable carriers that continue to obtain numbers only through full NXX codes, it can take up to 66 days for the carrier activate an NXX code it is allocated. In delegating authority, the FCC expressed concern that this Commission exercise flexibility in establishing fill rates so as not to deprive customers of their choice of carriers from whom to purchase service. The FCC's general concerns in this regard were set forth in its Numbering Resource Optimization Notice.¹

¹ See Numbering Resource Optimization, *Notice of Proposed Rulemaking*, CC Docket No. 99-200, FCC 99-122 (rel. June 2, 1999) (*Numbering Resource Optimization Notice*).

At this point, we conclude that while the 80% fill rate initially proposed in the ALJ ruling may be too inflexible in view of the lead time required to obtain number resources, the parties' proposed 70% fill rate is unduly low to discipline the number management process sufficiently. We conclude that, at least initially, a 75% fill rate strikes a reasonable balance between these opposing proposals, thereby promoting efficient number utilization while providing some flexibility to meet customer demand for numbers. However, the Commission may revise the 75% fill rate at a later date, if we determine that it is in the public interest to do so. A 75% fill rate is already being used in the State of Illinois, although it is only applied to NXX codes, but not to 1,000 blocks. The FCC has encouraged the California Commission to establish fill rates that are not inconsistent with those imposed by other states.

The 75% fill rate adopted herein shall be applied to all 1,000-number blocks held by a carrier at the rate center level. We decline to adopt Pacific's recommendation that fill rates be applied to all number blocks held by a carrier at the "lowest code assignment point" (LCAP). The LCAP refers to the lowest point at which a carrier assigns number resources in a particular area. For example, in an area where a carrier has more than one switch serving a single rate center, the LCAP would be at the switch level. In areas where a single switch serves more than one rate center, the LCAP would be at the rate center. Pacific argues that measuring the fill rate in relation to all numbering blocks held at the LCAP relates number demand more precisely to the measuring point at which number resources are actually constrained.

We decline to adopt the recommendation to calculate the fill rate at the LCAP or switch level in instances where a carrier has numbers assigned to multiple switches within a single rate center. The use of the LCAP for computing fill rates would create a situation where a carrier could qualify for

additional numbers in a rate center even though the overall fill rate for the rate center was below 75%. As long as the fill rate for an individual switch was above 75%, the carrier could still qualify for more resources under Pacific's proposed LCAP criterion. We are concerned that the use of the proposed criterion would unduly lead to the depletion of remaining thousand blocks or NXX codes sooner. In such a situation where a carrier's numbering resources are depleted within a switch but available within the rate center, the carrier should attempt to use number resources from the adjacent switch. GTEC objects to this alternative, arguing that moving numbers between switches within a rate center requires a form of unassigned number porting (UNP). GTEC argues that this solution is not yet feasible for all companies, would entail increased cost and complexities, and the Commission lacks jurisdiction to order UNP implementation.

We will leave it to carriers to work out whatever arrangements they deem necessary to efficiently utilize their number resources within the 75% fill rate criterion on a rate center basis. While solutions such as UNP may prove more costly and complex for carriers to implement, the numbering crisis in the 310 NPA requires that carriers be held to a strict standard for meeting fill rate based upon all numbers available within a rate center.

In computing the 75% fill rate, carriers will be required to account for all number resources that they hold, including numbers for customers served by a reseller or provided to a dealer pool. Carriers may include "reserved" numbers as being utilized only for a six-month period given the critical numbering situation facing the 310 NPA. Any numbers reserved beyond a six-month period must be counted as unassigned for purposes of computing fill rates. Thus, both assigned and aging numbers shall be included in determining the fill rate. Also, carriers may include administrative numbers in determining the fill rate. In addition to the above six-month limit on reserved numbers, we shall use the

same definitions previously adopted in the number utilization study for the 310 NPA (see Appendix A) to define what constitutes reserved, assigned, administrative and aging numbers. In summary, carriers may add up all the assigned, aging, administrative and reserved (up to the six-month limit) numbers that they hold in the rate center and divide that sum, by the total quantity of telephone numbers that they hold in the rate center. The quotient shall equal the fill rate.

We shall permit an exception to the 75% fill rate for equipment limitations constraining the utilization of certain number ranges. In some instances, customer premise equipment (CPE) may have technical constraints that limit the numbers accepted by the CPE to specific 1,000-number ranges. For example, some PBXs cannot accept assignments of numbers within the 8XXX or 9XXX range. Other PBXs require that the entire assignment of numbers be within the same 1,000-block. We shall thus permit an exception to the 75% fill rate to the extent of this CPE technical constraint where it is documented by the requesting carrier.

We decline, however, to adopt a categorical exception to the 75% fill rate merely because a carrier may seek a new code to meet a specific customer request for a large or consecutive block of numbers. Given the critical need to conserve numbers in the 310 NPA for the benefit of all customers, it is important to hold carriers to a stricter 75% fill rate standard, rather than to dilute the standard for the benefit of a relatively few large customers' number preferences. For a similar reason, we decline to dilute the 75% fill rate standard for proposed exceptions whenever it shows that its available numbers in a rate center will exhaust in 90 days or less. Depending on the results of the Commission staff's code utilization report and the availability of numbering resources, we may consider limited exceptions to the 75% fill rate based on carrier demand at a later

time. At this point, at least, we shall adopt a more conservative approach and exclude such exceptions from the adopted fill rate standard.

Certain NXX codes have traditionally been reserved or designated for special uses and have not been available for general commercial use. These numbers are restricted to special uses such as recorded public information announcements, time-of-day and weather forecasts, and special services such as pre-paid wireless or calling party pays services. We shall, therefore, permit fill rates for numbering resources allocated for special services to be calculated and reported separately.

We shall apply the 75% fill rate requirement uniformly to all carriers in the 310 NPA. The uniform application of the fill rate to all carriers will promote greater consistency. We disagree with parties seeking different fill rates for incumbent local exchange carriers (ILECs) in relation to new entrants. While ILECs may tend to have greater reserves of numbers available for assignment than do newer entrants, this phenomenon is inherent in the manner in which number resources are distributed generally, but is not caused by the imposition of a fill rate standard. Likewise, we shall apply the 75% fill rate standard to non-LNP-capable carriers as well as to other carriers. Non-LNP-capable carriers should not be relieved of the obligation to manage their numbering resources efficiently merely because they cannot currently participate in the 310 NPA pooling trial. We do not believe a lesser fill rate should be applied to non-LNP-capable carriers because it takes them longer to obtain full NXX codes than it will take pooling participants to obtain additional 1,000-blocks. Even though non-LNP-capable carriers may experience a somewhat longer wait to obtain number resources, they also obtain numbers in full blocks of 10,000, not merely in 1,000-number blocks as do pooling participants.

In the case of 310 NPA pooling participants, the 75% fill-rate criterion must be met before a 1,000-number block can be obtained from the pooling administrator within a given rate center. The pooling administrator shall require the carrier to provide any necessary documentation demonstrating that its actual fill rate across all the blocks it holds in a given rate center is 75% before it issues any blocks to the carrier. In the case of non-LNP-capable carriers that continue to participate in the NXX lottery, the 75% fill-rate criterion must be satisfied before they can obtain an additional NXX code through the lottery. The North American Number Plan Administrator (NANPA) shall likewise require any necessary documentation demonstrating that each carrier's actual fill rate across all the NXX codes it holds in a given rate center is 75% before issuing any NXX codes to carriers in the 310 NPA.

The fill rate criterion shall be used as an additional requirement to qualify for number resources as a supplement to any other qualifying criteria the Commission has previously adopted or may adopt in the future for the 310 NPA. Thus, for example, a carrier must satisfy both the minimum fill rate as well as any imminent exhaust criteria that may apply before it may be considered for additional number resources in the lottery for 310 NXX codes.

Sequential Numbering

Parties' Positions

MCI, AirTouch, GTEC, and Pacific oppose rules requiring sequential number assignment applied to individual numbers, but support sequential use of 1,000-blocks as a requirement for obtaining more numbers. GTEC and Pacific propose sequential use of 1,000-number blocks requiring a carrier to fill a prescribed percent of a block before moving to the next block. Parties argue that assigning individual numbers sequentially would unduly limit a service

provider's flexibility in meeting its customers' requests. GTEC also points out that some number blocks could not be assigned to certain end users or customers utilizing certain equipment. For example, business customers with PBXs or Centrex service could not use 1,000-blocks beginning with 0, 1, 8, or 9 as these digits were used as access codes and their use as a leading digit in a 1,000-block would misroute customers' calls.

AirTouch and Pac West et al. claim that sequential numbering without proper flexibility would create burdens and inconveniences both for carriers and consumers. AirTouch stated that non-LNP-capable carriers should not at all be subject to sequential and fill rate requirements since these carriers do not participate in number pooling. Pac-West et al. and MCI argue that sequential numbering rules are not important in a number-pooling environment, since for additional number requests, carriers would have to meet the fill-rate criterion in relation to numbers assigned within a 1,000-number block.

Discussion

The sequential use of numbering by carriers helps to promote efficient utilization of numbers and protects against contaminating blocks of numbers that could be donated for number pooling or reserved for other conservation measures. As previously directed in D.99-11-027, carriers assigned a code in the 310 NPA are to preserve as many poolable blocks of 1,000-numbers in their central offices as possible. As a condition of being assigned any further codes in the 310 NPA, we stated in D.99-11-027 that carriers were expected to abide by the following provisions taken from a Minnesota Number Pooling Task Force

Report² that the California Number Pooling Task Force presented for adoption by this Commission: ³

“All NXX code holders should attempt to provide services in a manner which does not encourage the inefficient use or depletion of telephone numbers in any [California] NPA. In order to accomplish this goal, all persons, including providers of telecommunications services who have accepted assignment of and make use of central office codes (NXXs) in [California], should preserve as many poolable blocks of thousand numbers in their central office codes as possible. This should enhance the effectiveness of thousand-block number pooling, as a number conservation tool, once it becomes practical to implement number pooling in [California] exchanges.

“All NXX code holders are encouraged to assign numbers from thousand number blocks already in use rather than from unused thousand number blocks. This recommendation is not meant to prohibit service providers from meeting customer number assignment.”

These general guidelines were to remain in effect until we prescribed in a subsequent decision more detailed criteria for carriers' use of sequential number assignments and fill rates. We recognize that for carriers that will be subject to 1,000-block number pooling, the requirement of a 75% fill rate effectively forces such carriers to use 1,000-number blocks in sequential fashion on a going-forward basis by each rate center. Before a pooling participant is allowed to obtain further 1,000-blocks, the previous block must have been at least 75%

² See the Minnesota Number Pooling Task Force Interim Report, February 11, 1999, Docket P-999/M-97-506

³ See the Interim Report of the Number Pooling Task Force, March 22, 1999, issued in this proceeding.

utilized. The requirement mandating sequential use of 1,000 number blocks is still necessary; however, for 1,000-blocks from previously obtained full NXX codes that have not yet been 75% utilized and for all codes held by non-LNP-capable carriers that will not be participating in the 310 NPA pooling trial.

Although non-LNP-capable carriers are not presently able to participate in 1,000-block pooling, they should still be subject to sequential use of 1,000-number blocks, and fill a given block up to at least the 75% fill rate before moving to a subsequent 1,000-block increment. Just because non-LNP-capable carriers cannot currently obtain numbers in 1,000-block increments, they should be held accountable for efficiently managing their number resources within each 1,000-block in their possession. Moreover, non-LNP-capable carriers should have an incentive to avoid contaminating their number blocks so that such blocks can eventually be made available for number pooling once currently non-LNP-capable carriers are able to pool.

Thus, consistent with our adoption of a 75% fill rate in this order, we shall require that all carriers assign numbers in the 310 NPA in sequential 1,000-number blocks, moving to the next block only once a 75% fill rate has been attained in the prior block. Each pooling participant must show that it has achieved a minimum fill rate of 75% in each sequential 1,000-number block within the rate center or switch, as applicable, where it seeks to obtain additional number blocks. To qualify for obtaining an additional NXX code, the non-LNP-capable carrier must show that a minimum 75% fill rate has been applied sequentially in each of the 1,000-blocks comprising its NXX codes in a given rate center where additional codes are requested.

We will leave it to the discretion of carriers to determine the sequence for assigning individual numbers within each 1,000-number block as long as the total utilization of the block reaches a 75% fill rate before moving to the next

block. In this way, we will preserve the goal of protecting 1,000-number blocks from contamination and promoting the efficient utilization of number resources while preserving carriers' discretion to manage numbering resources within each 1,000-block increment as they deem warranted.

Comments on Draft Decision

The draft decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g) and Rule 77.1 of the Rules of Practice and Procedure. Comments were filed on March 6, 2000, and reply comments were filed on March 13, 2000. We have reviewed parties' comments and taken them into account as appropriate in finalizing this order.

Findings of Fact

1. In D.99-09-067, the Commission adopted various number conservation initiatives pertaining to the 310 NPA, including the use of minimum fill rates which carriers must meet to be assigned additional blocks of numbers.

2. The FCC Order adopted September 15, 1999 (CC Docket No. 96-98) delegated authority to this Commission to establish number fill-rate thresholds and to require sequential number assignments to promote more efficient utilization of numbering resources.

3. In delegating authority, the FCC expressed concern that this Commission exercise flexibility in establishing required fill rates so as not to deprive customers of their choice of carriers from whom to purchase service.

4. Although an 80% fill rate may be too inflexible in view of the lead time required for carriers to obtain number resources, a 70% fill rate is too low to effectively discipline the number management process.

5. In some instances, a CPE may have technical constraints that limit the numbers accepted by the CPE to specific 1,000-number ranges. For example,

some PBXs cannot accept assignments of numbers within the 8XXX or 9XXX range.

6. A 75% fill rate criterion is already being used in the State of Illinois, although with some variations on the 75% criterion established herein. The FCC has encouraged the California Commission to establish fill rates that are not inconsistent with those imposed by other states.

7. At least initially, a 75% fill rate criterion strikes a reasonable balance, promoting efficient number utilization while providing some flexibility to meet customer demand.

8. The sequential use of numbering resources by carriers serves to promote efficient utilization of numbers and protects against contaminating blocks of numbers that could be donated to a number pool or reserved for other conservation measures.

Conclusions of Law

1. An initial 75% minimum fill rate by rate center should be adopted as a criterion for obtaining additional 1,000-number blocks or NXX codes in the 310 NPA applicable to all carriers.

2. The 75% fill rate should be computed in accordance with the ordering paragraphs below.

3. All carriers should assign numbers in the 310 NPA in sequential 1,000-number blocks, moving to the next block only once a 75% fill rate has been attained in the prior block.

O R D E R

IT IS ORDERED that:

1. A minimum fill rate criterion of 75% is hereby adopted to become effective immediately as a prerequisite for the assignment of NXX codes (in the case of non- Local Number Portability (LNP) capable carriers) and of 1,000-number blocks (in the case of LNP-capable carriers) in the 310 Numbering Plan Area (NPA).
2. The 75% fill rate shall be applied to all blocks of numbers held by a carrier at the rate center level. The fill rate applicable to number resources reserved or designated for noncommercial special uses may be computed separately.
3. In computing the fill rate, carriers must account for all number resources that they hold, including numbers for customers served by a reseller or provided to dealer pools.
4. Carriers may include "reserved" numbers as being utilized only for a six-month period. Any numbers reserved beyond a six-month period must be counted as unassigned for purposes of computing fill rates.
5. In computing the fill rate, carriers may also include administrative numbers, aging numbers, and assigned numbers.
6. In defining what constitutes reserved, administrative, aging and assigned numbers, the same definitions previously adopted in the number utilization study for the 310 NPA shall be used (as set forth in Attachment A).
7. To compute the fill rate in each rate center, carriers may add up all the assigned, aging, administrative and reserved (up to the six- month limit) numbers that they hold in the rate center and divide that sum, by the total quantity of telephone numbers that they hold in the rate center.

8. An exception to the 75% fill rate requirement may be permitted to the extent of this CPE technical constraint where it is documented by the requesting carrier.

9. Carriers shall assign numbers in the 310 NPA in 1,000-number block sequence, moving to the next block only once a 75% fill rate has been attained in the prior block. Within a given 1,000-number block, however, carriers shall have discretion in assign numbers in whatever sequence they deem warranted as long as the overall 75% fill rate criterion is observed.

10. The fill rate criterion shall be used in conjunction with any other qualifying criteria the Commission has established or may yet establish in the 310 NPA before a carrier may become eligible for either a 1,000-number block (for LNP-capable carriers) or for an NXX code (for non-LNP-capable carriers).

This order is effective today.

Dated March 16, 2000, at San Francisco, California.

RICHARD A. BILAS
President
HENRY M. DUQUE
JOSIAH L. NEEPER
CARL W. WOOD
LORETTA M. LYNCH
Commissioners