

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of
Numbering Resource Optimization

CC Docket No. 99-200

OPPOSITION OF BELLSOUTH CORPORATION

BELLSOUTH CORPORATION

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BellSouth Opposition
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OPPOSITION OF BELLSOUTH CORPORATION

BellSouth Corporation, by counsel and on behalf of itself and its wholly owned subsidiaries (“BellSouth”), respectfully submits its opposition to the above-captioned state petition¹ seeking a waiver of the Commission’s pooling contamination threshold rule.² Specifically, the California Public Utilities Commission (“CPUC”) requests a waiver of the Commission’s rules so that it can raise the pooling contamination threshold from the current ten percent to 25 percent in California.³

The CPUC has failed to satisfy the burden of proof to justify a waiver. As the questions posed by the Commission reveal, there are significant consequences to increasing the contamination level that must be analyzed and addressed prior to modifying this rule. In addition, the CPUC has failed to demonstrate a compelling need

¹ Petition of the California Public Utilities Commission and the People of the State of California for Waiver of the Federal Communications Commission’s Contamination Threshold Rule, CC Docket No. 99-200 (dated Sept. 5, 2002) (“CPUC Petition”).

² See *Wireline Competition Bureau Seeks Comment on the Petition of the California Public Utilities Commission and the People of the State of California for Waiver of the Federal Communications Commission’s Contamination Threshold Rule*, CC Docket No. 99-200, *Public Notice*, DA 02-2822 (rel. Oct. 24, 2002) (“*Public Notice*”).

³ See 47 C.F.R. § 52.20(c)(1).

to increase the threshold. The CPUC has neither explained why other less costly and less burdensome number optimization strategies are not available nor provided any type of cost-benefit analysis. Accordingly, the Commission should deny the CPUC's waiver request.

I. INTRODUCTION AND SUMMARY

The Commission's rules mandate that "[a]ll service providers required to participate in thousands-block number pooling shall donate thousands-blocks with ten percent or less contamination to the thousands-block number pool for the rate center within which the numbering resources are assigned."⁴ The CPUC requests a waiver of the above rule so that it can increase the contamination threshold to 25 percent in California.

In its *Public Notice*, the Commission asks a series of questions regarding the CPUC's request. Specifically, the Commission asks commenters to: (1) address the technical and policy implications of increasing the contamination threshold; (2) identify alternative methods of increasing the availability of numbers in California; (3) address the advantages and disadvantages (including the associated costs) of increasing the threshold; and (4) discuss the extent to which increasing the contamination level will improve numbering resource optimization or otherwise serve the public interest in California.⁵ These queries are thoughtful and probing. More importantly, the answers to

⁴ 47 C.F.R. § 52.20(c)(1).

⁵ *Public Notice* at 2.

these questions demonstrate the deficiencies of the CPUC's request and highlight the burdens and costs associated with increasing the contamination threshold. Accordingly, the Commission should deny the CPUC's Petition.

II. THE TECHNICAL LIMITATIONS ASSOCIATED WITH INCREASING THE CONTAMINATION THRESHOLD WEIGH AGAINST GRANTING THE REQUESTED WAIVER.

The *Public Notice* asks if there are any technical limitations to increasing the contamination threshold. The answer is yes. Adoption of the CPUC's proposal would have a direct and significant effect on carriers' networks and the Number Portability Administration Center ("NPAC"). Specifically, raising the contamination threshold would not only require carriers to implement network and software modifications to accommodate this change but also would substantially increase the need for additional storage capacity.

There are specific limits on the number of records/amount of data that service providers and the NPAC can carry and store on their networks. If this capacity is maximized or exceeded, not only can network congestion occur but service to customers can be disrupted as well. Raising the contamination threshold would mean more data to store and more transactions to process, which, in turn, would require more capacity. The potential impact on the Public Switched Telephone Network ("PSTN") and the NPAC are of serious concern to BellSouth, especially in light of the congestion problems recently experienced by the NPAC under the existing ten percent threshold due to the increased volume of pooling. In fact, the NPAC has experienced several recent outages during which pooling and porting processes were degraded. Increasing the number of blocks

that must be donated could adversely affect the NPAC and lead to additional outages. Such an outcome must be avoided. Clearly, there needs to be a thorough understanding of the potential effects on the PSTN and the NPAC in order to assess the viability of the CPUC's proposal.

In addition to the increased demand for storage capacity described above, a higher contamination level would reduce the efficiencies and benefits associated with Efficient Data Representation ("EDR"). EDR allows a Location Routing Number ("LRN") to be associated with a block of one thousand numbers as a single record. Because EDR allows one thousand numbers to be downloaded and stored in a carrier's database as a single record, instead of one thousand records, it extends the capacity of a carrier's Service Control Points ("SCPs") for number pooling.

In an EDR environment, the number of records needed to handle a single *clean, uncontaminated* 1000-number block is one. For a contaminated block⁶ that is donated to the industry pool, there is one record associated with the donated 1000-number block plus additional records for each contaminated telephone number in the donated block. These additional records identify numbers as intra-company ports so that the contaminated

⁶ A contaminated block of numbers refers to a block of 1000 numbers, in which at least one telephone number is not available for assignment (*i.e.*, encompassing the categories of assigned, aging, administrative, reserved, and intermediate). *Numbering Resource Optimization*, CC Docket No. 99-200, *Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 7574, 7661, ¶ 190 n.459 (2000) ("*Report and Order*").

numbers can be ported back to the donating service provider.⁷ If the contamination threshold is increased to 25 percent, the number of records that must be stored in carriers' SCPs as well as the NPAC will increase significantly because of the larger volume of records required for intra-company ports. The efficiencies derived from EDR are substantially diminished under this scenario.

Moreover, the Commission has already recognized that thousands-block number pooling places additional strain on carriers' networks due to the large volume of porting occurring as a result of pooling.⁸ Raising the threshold will only increase the strain on carriers' networks due to the increased number of intra-company ports. This additional strain could lead to service disruption or even disconnects.

Carriers operating in a non-EDR environment also would be affected by an increase in the contamination threshold. For non-EDR carriers, the number of pooling records needed to handle a single thousands-block of numbers is 1000. One thousand records must be stored regardless of the contamination level. In other words, if a carrier must donate a specific thousands block, the number of records required to handle the donated thousands block in the NPAC is 1000. The increase in the number of records that must be stored by the NPAC due to raising the contamination levels in a non-EDR

⁷ If a number has been ported out, no additional record for intra-company porting is necessary because the ported-out number does not have to be ported back to the donating service provider.

⁸ *Report and Order*, 15 FCC Rcd at 7657, ¶ 182.

environment is $1000 \times K$, where K is the number of *additional* blocks to be donated to the industry pools due to raising the contamination level from ten to 25 percent.

As the foregoing demonstrates, any decision regarding whether or not to grant the CPUC's request must include a thorough analysis of the technical issues associated with increasing the contamination threshold. The potential risk to the stability of carriers' networks and continuing service to customers is too great. Because the CPUC has not shown that the benefits of raising the contamination threshold justify the possible risks to the network or the NPAC, the Petition must be denied.

III. THERE ARE STRONG POLICY JUSTIFICATIONS FOR NOT ALLOWING THE CPUC TO INCREASE THE CONTAMINATION THRESHOLD.

There are a number of compelling policy reasons for refusing to allow the CPUC to raise the contamination level to 25 percent. As an initial matter, BellSouth cautions the Commission against moving away from its national framework for number optimization in the absence of a substantial justification. The Commission has previously concluded that a uniform national threshold is preferable to a myriad of different contamination levels.⁹ BellSouth urges the Commission to continue this approach.

Requiring carriers to comply with multiple thresholds across different states would place significant administrative burdens on carriers. As discussed above, carriers that have donated contaminated blocks to the pool must port those numbers back to themselves (intra-company porting). For most carriers, this process is a manual effort

⁹ *Id.* at 7661, ¶ 191.

that is extremely labor intensive. Raising the threshold to 25 percent would more than double not only the quantity of numbers that would have to be verified in carriers' billing, provisioning, and number assignment systems but also the quantity of necessary port-backs and the service orders that must be issued to change customer records to reflect the ported condition of the numbers. Again, because these tasks involve manual processes, raising the threshold would require additional resources thereby leading to increased costs.

Another policy implication of raising the contamination level would be the need to re-examine the pooling milestones¹⁰ (e.g., block protection, block donation, etc.). A higher contamination level would mean that more numbers would have to be ported back to the donating service provider. These port-backs are manual and must be completed on the day of block donation. The current configuration of the pooling system managed by the national Pooling Administrator limits carriers to a certain number of transactions per hour. Raising the threshold would not only threaten a carrier's ability to complete the required port-backs on the donation date but also increase the manual workload. Moreover, incomplete port-backs would result in service disruption for existing customers. To avoid this situation, there must be a thorough analysis of the impact of

¹⁰ Sections 7.1 and 7.2 of the Industry Numbering Committee (INC)'s Thousand Block (NXX-X) Pooling Administration Guidelines (dated November 22, 2002) identify milestones and associated activities that must be accomplished for number pooling implementation (e.g., First Implementation Meeting; Forecast Report Date; Block Protection Date; etc.).

raising the threshold to determine whether any changes to the pooling milestones are necessary.

In addition to the administrative burdens described above, carriers would need to revise their cost studies and associated tariffs for the recovery of pooling costs. A number of carriers submitted cost studies for thousands-block number pooling based on certain assumptions, including a ten percent contamination threshold. A change in the threshold would necessitate a new cost calculation and a corresponding tariff modification.

In order to develop accurate and comprehensive cost studies, certain questions must be answered in advance. For example, if the Commission were to allow a state commission to increase the contamination level, would the new level be prospective or retroactive? The answer to this question would affect a carrier's costs. Although both retroactive and prospective application of a higher threshold would increase a carrier's pooling costs due to network modifications and increased labor, retroactive application in areas in which pooling has already occurred would result in higher costs than a prospective-only change.

As demonstrated above, the policy implications of increasing the contamination level weigh against granting the CPUC's request. The shift away from the national numbering optimization framework, the administrative difficulties of complying with multiple contamination thresholds, and the additional costs incurred by carriers are persuasive evidence that the Commission should not grant the Petition.

IV. THERE ARE LESS BURDENSOME AND LESS COSTLY ALTERNATIVES FOR INCREASING THE AVAILABILITY OF NUMBERS IN CALIFORNIA.

The Commission wisely asks whether there are alternative methods for increasing the availability of numbers in California.¹¹ Indeed, there are a number of less burdensome and less costly alternatives that should be considered prior to adopting the more radical measure of increasing the contamination threshold. These options include, among other things, decreasing the intervals by which numbers are aged,¹² reducing number reservation periods,¹³ and consolidating rate centers.¹⁴ Still, another option is the implementation of mandatory ten-digit dialing. Mandatory ten-digit dialing does not require specific NXX codes to be “protected” (or made unassignable) for the sake of maintaining seven-digit dialing. For example, there are three NPAs within the San Francisco-Oakland-San Jose MSA (415, 650, and 510). According to the NANPA website, each of these NPAs has seven-digit local dialing. If an NXX is assigned from one of these three NPAs, that NXX cannot be assigned in the other NPAs.¹⁵ Use of the

¹¹ See *Public Notice* at 2.

¹² The Commission’s rules allow carriers to age residential and business numbers up to a maximum of 90 and 360 days, respectively. 47 C.F.R. § 52.15(f)(1)(ii).

¹³ The Commission’s rules allow carriers to reserve numbers for up to a maximum of 180 days. 47 C.F.R. § 52.15(f)(1)(vi).

¹⁴ The Commission has already encouraged state commissions to explore rate center consolidation as a measure to help alleviate number exhaust. See *Numbering Resource Optimization*, CC Docket No. 99-200, *Second Report and Order*, 16 FCC Rcd 306, 367-68, ¶¶ 146-147 (2000) (“*Second Report and Order*”).

¹⁵ “Where a community of interest contains portions of two or more NPAs, a particular NXX code that has been assigned for use within one of the NPAs is ‘protected,’ or made

same NXX in the same local calling area would lead to dialing conflicts in a seven-digit dialing environment. With ten-digit dialing, calls are routed based on the first six digits of a number (NPA-NXX) thereby eliminating the need to protect certain NXXs.

All of the above measures would increase the numbers available for assignment in California without the extra burdens and costs associated with increasing the contamination level. Because the CPUC has not demonstrated that other less costly and less burdensome alternatives are unacceptable, the instant Petition must fail.

V. THE DISADVANTAGES OF RAISING THE CONTAMINATION LEVEL OUTWEIGH ANY PERCEIVED ADVANTAGES.

A number of the disadvantages associated with allowing the CPUC to increase the contamination level in California have already been addressed above. These disadvantages include: (1) the additional costs to implement software and system modifications to accommodate the higher threshold level and to ensure sufficient storage capacity; (2) the adverse effects on the efficiency and cost-effectiveness of EDR; and (3) the administrative difficulties, increased workload, and additional costs of complying with differing thresholds.

The only consequence of raising the contamination threshold identified by the CPUC is that there will be more numbers donated to the pool. The CPUC states that “by

unassignable in the adjacent NPA. This permits every switch in the local calling area to route calls based on the NXX code, rather than the NPA-NXX, even across NPA boundaries. In addition, other protected codes are reserved for special services, such as N11 codes. Thus, protected codes are not available for number assignments to end users.” *Numbering Resource Optimization, et al.*, CC Docket No. 99-200, *et al.*, *Notice of Proposed Rulemaking*, 14 FCC Rcd 10322, 10376, n.201 (1999).

increasing the contamination threshold, California can retrieve from carriers currently holding blocks of numbers, a larger quantity of numbers on average.”¹⁶ BellSouth does not dispute this fact. However, the analysis provided by the CPUC is woefully inadequate. First, the CPUC fails to recognize that service providers are entitled to maintain a six-month inventory of numbers.¹⁷ Therefore, it is incorrect to assume that every block with a contamination level between ten and 25 percent would be donated to every pool in every rate center. Because the CPUC’s analysis does not take into account this six-month inventory rule, it overstates the blocks that would be added to pools.

Second, it is unclear from the petition whether there is even a need to add blocks to most of the California rate centers in which pooling has commenced. Upon review of the pooling reports posted on NeuStar’s website, BellSouth can find only a handful of rate centers where the Pooling Administrator had to request additional codes from the NANPA for pool replenishment. A need for additional codes in certain rate centers does not justify an across-the-board increase in the contamination level.

Third, there are other ways in which additional blocks in certain rate centers can be obtained. For example, BellSouth’s analysis of data on NANPA’s website reveals that California has a much higher number of NXXs categorized as “unassignable” than several other states.¹⁸ On average, California has 81 “unassignable” NXXs for each

¹⁶ CPUC Petition at 1.

¹⁷ *First Report and Order*, 15 FCC Rcd at 7660, ¶ 189.

¹⁸ See http://www.nanpa.com/number_resource_info/co_code_assignments1.html (CO Code (Prefix) Status - Excel Spreadsheet Files).

NPA, whereas Florida, Georgia, North Carolina, Illinois, Washington, Ohio, Texas, and New Jersey have an average of 21, 21, 23, 23, 24, 27, 27, and 28 respectively.

It is expected that each NPA will have some "unassignable" codes. For example, the NXXs that match the home NPAs and the N11 abbreviated dialing codes typically are not assignable. However, it is unclear why California has such a high number of "unassignable" codes when compared with other states. An analysis should be conducted to determine whether any of these "unassignable" NXXs can be released for assignment. If so, perhaps some of those NXXs could be donated to pools in those rate centers in which additional blocks are needed. The release of some of these "unassignable" codes combined with the other less costly alternatives described in Section IV above is preferable to raising the contamination level.

Another disadvantage of granting the CPUC's request is that service providers with high utilization would be disadvantaged and their customers adversely affected. Large business customers often require whole NXX codes. Allowing carriers to retain only those blocks with greater than 25 percent contamination would reduce the number of blocks desirable by large business customers, thereby hindering carriers' ability to fulfill large customer requests. With higher contamination levels, it is less likely that ranges of vacant numbers specifically requested by business customers would be available for assignment. This problem would be exacerbated in those rate centers serving large business customers where the demand for large volumes of numbers would be greater. Delays in a carrier's ability to obtain numbers could result in delays in providing service

to customers as carriers are forced to request additional codes from the NANPA or the Pooling Administrator.

Another inefficiency associated with a higher contamination level is the increased demands and administrative burdens placed on carriers and the Pooling Administrator. Service providers currently move blocks of numbers between switches in the same rate center to provide service to their customers. This intra-company porting does not involve the Pooling Administrator. Carriers accomplish this task typically by moving blocks with low contamination levels. If the contamination threshold is raised, carriers will have less incentive to move blocks with high contamination between switches because of the increased workload to accomplish intra-service provider ports. As a result, carriers could find themselves requesting more blocks from the Pooling Administrator. There is a high probability that the carriers requesting these additional blocks would end up receiving blocks they had previously donated to the pool. Such an outcome is inefficient and creates unnecessary work for all parties involved.

VI. THE CPUC HAS NOT DEMONSTRATED THAT RAISING THE CONTAMINATION LEVEL WILL IMPROVE NUMBER RESOURCE OPTIMIZATION OR SERVE THE PUBLIC INTEREST.

The Commission asks how raising the contamination level will improve number resource optimization or serve the public interest.¹⁹ Based on the information provided in the Petition, BellSouth does not believe it will. As demonstrated throughout this pleading, the CPUC has failed to provide sufficient evidence to support a waiver. As the

¹⁹ *Public Notice* at 2.

Commission appropriately recognizes, there are a number of issues that must be addressed prior to granting the requested waiver, none of which the CPUC has discussed. For example, the CPUC has neither explained why other less costly and less burdensome number optimization strategies are not available nor provided any type of cost-benefit analysis. In addition, the CPUC's analysis overlooks the interplay of other existing number optimization rules, specifically, a service provider's right to maintain a six-month inventory of numbers.²⁰ The failure to consider this requirement is significant. As demonstrated in Section V above, it is possible that the perceived benefits of raising the threshold may, in fact, not exist. As stated earlier, it is incorrect to assume that, given the six-month inventory rule, every block with a contamination level between ten and 25 percent would be donated to every pool in every rate center. The CPUC's analysis therefore is incomplete and fails to demonstrate that raising the contamination level will serve the public interest. Accordingly, the Commission should deny the Petition.

VII. CONCLUSION

Although BellSouth commends the CPUC for its efforts to address proactively the number situation in California, the CPUC has not met its burden to warrant a waiver of the Commission's pooling contamination rule. There are broad technical and policy implications that weigh strongly against granting the request. Moreover, there are a number of less burdensome and less costly alternatives that should be considered prior to adopting the more radical measure of increasing the contamination threshold. Because

²⁰ *First Report and Order*, 15 FCC Rcd at 7660, ¶ 189.

the CPUC has failed to demonstrate a compelling reason to deviate from the national contamination threshold, the Commission should deny the waiver request.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I do hereby certify that I have this 13th day of December 2002 served the following parties to this action with a copy of the foregoing **OPPOSITION OF BELLSOUTH CORPORATION** by electronic filing and/or by placing a copy of the same in the United States mail, postage prepaid, addressed to the parties listed below.

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+ VIA ELECTRONIC FILING