

DESCRIPTION & JUSTIFICATION

I. INTRODUCTION

In June 1999, the Federal Communications Commission (FCC) released its Notice of Proposed Rule Making (NPRM) In the Matter of Numbering Resources Optimization (CC Docket No. 99-200), which sought to ensure sufficient access to numbering resources for all service providers that need them to enter into or compete in telecommunications markets and avoid, or at least delay, exhaust of the North American Numbering Plan.

On March 31, 2000, the FCC released the *First Report and Order*¹ in this proceeding. The *First Report and Order* adopted a system for allocating numbers in blocks of 1,000, rather than 10,000 (thousands-block number pooling or TBNP) and, established a plan for the national rollout of TBNP. This order also determined that the costs that carriers incur to support the national roll-out of TBNP are interstate costs that ILECs should recover under a federal cost recovery mechanism. On December 31, 2001, the FCC released the *Third Report and Order*², which established the Federal Cost Recovery Mechanism for TBNP. The order also set forth a strict three-prong test, similar to the test adopted for Local Number Portability (LNP), for determining which costs are eligible for recovery under the federal mechanism. In addition, the Commission required that TBNP implementation costs must be offset by any savings the ILEC

¹ Numbering Resource Optimization, *Report and Order and Further Notice of Proposed Rulemaking in CC Docket No. 99-200*, (rel. March 31, 2000), FCC 00-104, (*First Report and Order*).

² Numbering Resource Optimization, *Third Report and Order and Second Order on Reconsideration in CC Docket No. 99-200*, (rel. December 28, 2001), FCC 01-362, (*Third Report and Order*).

realizes due to a deferral of area code relief resulting from the implementation of TBNP.

Cincinnati Bell Telephone (CBT) seeks to recover its costs that are directly related to the implementation of TBNP in accordance with FCC guidelines. Certain information in this filing is provided under confidential cover. Many of the costs associated with implementation of thousand-block number pooling are vendor related and considered proprietary to CBT. Public release of this information would be detrimental to CBT.

This filing is being made on 15 days' notice under the FCC's streamlined filing procedures. Cost support for this filing is submitted pursuant to Section 61.38 of the FCC's Rules and is provided to the FCC under confidentiality.

II. RATEMAKING

Paragraph 39 of the Third Report and Order, which details cost recovery methodology requires the assignment of extraordinary costs to the common line basket. CBT recovers all common line revenue through End User Common Line rates. CBT's TBNP adjustment will be applied to common line rates as an exogenous adjustment pursuant to the FCC's rules and is detailed on EXG-1 and EXG-2 of the Tariff Review Plan (TRP). CBT is adjusting its End-User Common Line Charge in this filing.

III. CALCULATION OF EXOGENOUS ADJUSTMENT

CBT calculated its TBNP exogenous adjustment by obtaining implementation costs offset by area code relief savings. CBT examined both capital costs and expenses

incurred in the implementation of TBNP. CBT has included in its TBNP costs only directly assigned costs. CBT's exogenous TBNP calculations are shown on Attachment 3 and Attachment 4.

Capital Costs: CBT's 377C investment annual charge factors and levelized 2-year investment charge factors are shown on Chart - 1.

Cincinnati Bell Telephone (CBT) calculates annual charge factors (ACFs) in order to determine the annual costs associated with an investment. These calculations are typical to the cost methodologies employed in many cost studies performed by the local exchange companies. The annual charge factor identifies the levelized annual amount that CBT must recover over an asset's life so that the present value of that levelized amount recovers all costs associated with the investment. Annual charge factors can incorporate both capital related costs and operating expenses. This description relates only to the capital related costs.

CBT includes four components in its annual charge factors for capital related costs. These components are:

1. the recovery of the initial investment, i.e. depreciation;
2. the costs of using debt and equity capital;
3. the taxes associated with the use of equity capital; and
4. the property taxes associated with the asset.

The depreciation calculation involves both book depreciation and tax depreciation. Book depreciation is the repayment of the initial investment and it represents the depreciation component of the annual charge factor. CBT's calculation uses straight-line depreciation. Tax depreciation is not a component

of the depreciation portion of the annual charge factor. However, it is calculated to determine the appropriate expense deductions used in determining the income taxes. Book and tax depreciation are calculated separately since these amounts and their timing will differ.

The second component relates to the cost of capital. CBT calculates the asset's associated cost of capital for each year of the asset's economic life. This is calculated as the net investment multiplied by the composite cost of money. In this filing, the composite cost of money is 11.25%. CBT's annual charge factors refer to this component of its annual charge factor as the "Post Tax Income". This terminology carries over from a previous model that CBT used to calculate its annual charge factors.

Income taxes are involved in the annual charge factors because the return to equity investors is paid from after-tax earnings. Therefore, it is necessary to recognize that income taxes must be paid before a return can be made to the equity investors. CBT utilizes a 35% federal income tax rate in its calculations. CBT does not pay income taxes in the state of Ohio but pays a gross receipts tax.

Finally, CBT's annual charge factor includes a component for property taxes. CBT pays property tax on its net investments. Due to various taxing authorities in CBT's operating area, CBT uses average inputs into its annual charge factor calculation.

As described above, CBT calculates the costs associated with each of these components on a year-by-year basis. These costs are then levelized, that is averaged with consideration for the time value of money, over the economic life of the asset under study. The levelized annual amount is the fixed annual amount whose present value equals the present value of the annual costs calculated for each of the above components. In the case of central office switching equipment, CBT utilizes a 12-year economic life as the period of time to calculate the costs. CBT's model calculates these costs using a mid-year convention.

The methodology used in this filing to calculate annual charge factors is the same methodology used by CBT in its state cost study filings in Ohio and Kentucky. This methodology was reviewed and approved in CBT's Ohio TELRIC proceeding, Case No. 96-899-TP-ALT.

Expenses: Present Worth (PW) factors were applied to Expenses for TBNP to determine the PW of Expenses for TBNP exogenous costs as shown on Attachment 4, Page 1.

Total TBNP Exogenous Costs: Attachment 4, Page 1 shows CBT's calculation of the total TBNP exogenous costs. The factors from Chart - 1 are carried forward and applied to CBT's TBNP Present-Worth incremental capital investment. CBT's incremental TBNP costs are split over the 2-year recovery period, beginning in April, 2003 by spreading the costs over 2/3 of 2003, the full year of 2004, and 1/3 of 2005.

The total PW of Capital Costs and Expenses were summed, then reduced by the TBNP cost savings. CBT applied an overhead Allocation factor to the total to yield CBT's total TBNP exogenous adjustment of \$3,184,282. In its Tariff Review Plan (TRP) CBT shows an TBNP exogenous cost recovery of one-half of the total recover amount to account for the 2-year recovery period.

IV. THOUSANDS-BLOCK NUMBER POOLING COSTS

In the *Third Report and Order* the FCC set forth three criteria that must be satisfied for carriers to be eligible for cost recovery. Those criteria are as follows:

First, only costs that would not have been incurred “but for” thousands-block number pooling are eligible for recovery.

Second, only costs incurred “for the provision of” thousands-block number pooling are eligible for recovery.

Third, only “new” costs are eligible for recovery.

In this section, CBT sets forth the general cost categories identified for cost recovery (i.e., Shared Network Expenses, Network Upgrades, Network Expenses, Network Operations, and Operation Support Systems (OSS) Modifications).

All costs associated with the stated categories meet the above-defined criteria established by the FCC. Each of the costs CBT identifies for cost recovery was incurred “for the provision of” number pooling, and would not have been incurred “but for” number

pooling. In setting the guidelines for meeting these two criteria, the Commission stated,

[O]nly the demonstrably incremental costs of thousands-block number pooling may be recovered.... [C]osts specifically incurred in the narrowly defined thousands-block pooling functions are those incurred specifically to identify, donate and receive blocks of pooled numbers, to create and populate the regional databases and carriers' local copies of these databases, and to adapt the procedures for querying these databases and for routing calls so as to accommodate a number pooling environment.³

In addition, all of the costs CBT seeks to recover are “new”. The FCC’s definition states:

[C]osts are not “new”, and thus are ineligible for extraordinary treatment as thousands-block number pooling charges, if they previously were incurred, are already being recovered under ordinary recovery mechanisms, or are already being recovered through the number portability end- user charge or query charge.⁴

None of the costs described below were incurred prior to the implementation of TBNP, nor are any of those costs already being recovered in some other manner. Consequently, for each of the claimed cost elements, the “new” portion of the FCC’s three-pronged test is met.

CBT established and maintained separate tracking codes for its TBNP efforts. All personnel assigned to a specific project are required to charge their time to the national number pooling tracking/project code. Therefore, all work efforts in support of the programs described below are clearly segregated.

1. SHARED INDUSTRY COSTS

NeuStar NPAC Testing: NPAC testing invoiced to CBT by NeuStar associated

³ *Id.* at ¶44.

⁴ *Id.* at ¶46.

with NPAC release 3.0 and 3.1 testing between the NPAC and the service providers.

NeuStar NPAC Release 3.0 & 3.1: Release 3.0 and 3.1 provide the feature capability associated with TBNP and EDR. EDR is necessary for efficient implementation of TBNP.

The Cost of the Pooling Administrator: CBT included in its costs, its share of the current year and next two years of costs associated with the operation of the National Pooling Administrator. As a basis for this cost, CBT used the North American Numbering Plan Billing and Collection (NBANC)'s May 2, 2002 submission to the FCC.

2. NETWORK UPGRADES

Network upgrade costs associated with deploying TBNP have been identified as follows. Without these features and enhancements calls will either fail or be improperly routed.

Service Switching Point (SSP)

5ESS: CBT's 5ESS End Offices and Tandem Switch required additional SSP features to perform call routing in a TBNP environment. Lucent developed a feature functionality known as 1000 Block Number Pooling Feature Using Number Portability, 99-5E-7210, SFID 530 in accordance with ANSI Standards Committee T1S1.6 Technical Requirements Document TRQ 4, "Thousands Block Number Pooling Using Number Portability". This technical requirement specifically addresses the needs of the switching network to correctly route a call when: (1) a thousands-block is pooled into a switch, but

the individual numbers are not assigned; and (2) when a thousands-block is pooled into a switch and one of those numbers is ported to a different switch within the rate center.

The feature provides for proper call routing and handling of pooled numbers. Without the feature calls will either fail or be misrouted.

DMS10: CBT's DMS10 End Offices required additional features to perform call routing in a TBNP environment. Nortel developed the Number Pooling Software package ID Pool in accordance with ANSI Standards Committee T1S1.6 Technical Requirements Document TRQ 4, "Thousands Block Number Pooling Using Number Portability". This technical requirement specifically addresses the needs of the switching network to correctly route a call when: (1) a thousands block is pooled into a switch, but the individual numbers are not assigned; and (2) when a thousands-block is pooled into a switch and one of those numbers is ported to a different switch within the rate center. The feature provides for proper call routing and handling of pooled numbers. Without the feature calls will either fail or be misrouted.

Signal Transfer Points (STP): The STP Number Pooling feature is required to support EDR and is necessary for efficient implementation of TBNP. EDR provides the ability to record a block of pooled numbers as a single entry in the database as opposed to 1,000 individual entries, thereby delaying capacity exhaust.

3. NETWORK EXPENSES

Network Planning & Implementation: Project Management provides oversight for the planning, development and implementation of TBNP. Project Managers also enable the inter-departmental coordination and management associated with project

deliverables in order to ensure compliance with milestones agreed upon by the industry, with federal requirements and regulatory standards that have been established for TBNP.

Network Engineering Administration: Costs associated with the project management team required to manage the implementation of TBNP across all network departments. This team is responsible for managing the changes to the switching and signaling networks for number pooling and develops the process and procedure changes required for TBNP implementation.

Number Pooling Code Administration: Costs associated with Engineering and Provisioning personnel who perform the procedures to implement and support TBNP.

These functions include but are not limited to:

- * Perform assessment of contaminated blocks for donation to the pool, review k-blocks for exclusions of certain service types incompatible with porting, and resolve discrepancies for working TN's identified in a contaminated block.
- * Approve the final list of thousands blocks to be donated to the industry pool.
- * Forward the file/report containing the designated thousand blocks that are available for donation to the Pooling Administrator.
- * Notify the Pooling Administrator and internal CBT organizations of donated thousand blocks.
- * Verify donated blocks in the Local Exchange Routing Guide (LERG) and Pooling Administrator Database.
- * Identification and development of new processes and procedures in support of Industry Numbering Committee (INC) guidelines.

- * Review contaminant lists to validate and exclude as required
- * Maintain accurate block donation and receipt records.
- * Complete activities to receive new blocks as new telephone number inventory

4. OPERATION SUPPORT SYSTEMS (OSS)

OSS expenses are associated with the automation of processes created by the need to identify, donate, and receive pooled numbers. These systems also support the creation and population of number pooling databases, adapt procedures for querying these databases, and support the routing of calls to accommodate a number pooling environment. These systems include, but are not limited to, order entry systems, telephone number assignment, customer record storage, and NXX-X management capability. Systems impacted are described in Attachment 2. For each system listed, a reason for inclusion of the costs of the system are shown. There are three reasons identified. They are 1) to either identify, donate or receive pooled blocks; 2) to create and populate the regional databases; and 3) to enable CBT to query databases and to route calls to accommodate number pooling.

Project Management expenses were incurred by vendor managers to coordinate Number Pooling project resource allocation and project completion.

V. COST SAVINGS FROM THE DEFERRAL OF NPA SPLITS AND OVERLAYS

The First Report and Order and the Third Report and Order direct carriers to show the cost savings that they realize due to any area code splits or overlays that are deferred due to the implementation of thousands-block number pooling.

CBT operates in three NPAs--Ohio 513, Kentucky 859, and Indiana 812.

According to NANPA's *2002 Numbering Resource and Utilization and Forecast (NRUF) and NPA Exhaust Analysis* (issued June 5, 2002), the projected exhaust dates for the three NPAs in which CBT operates are:

Ohio 513	3Q 2008
Kentucky 859	2Q 2011
Indiana 812	4Q 2004

The NANPA analysis indicates that the 513 and 812 dates reflect the impact of pooling, while the 859 date does not.

The 812 exhaust date is unchanged from the previous forecast. Pooling within the Cincinnati MSA portion of the 812 NPA began in February 2003 and the 812 NPA relief planning process is continuing with no anticipated deferral as a result of pooling.

Therefore, CBT will realize no savings due the implementation of pooling in the 812 NPA.

The 2002 NANPA analysis moves the exhaust date for the 513 NPA from 2Q 2003 to 3Q 2008 (21 quarters) reflecting both the impact of pooling and decreased

demand for codes. CBT estimates that the maximum impact of pooling in the NANPA analysis for the 513 NPA would be 13 quarters (2Q 2005 to 3Q 2008).⁵

In spite of the fact that pooling in the 513 NPA (implemented March 17, 2003) is estimated to delay the exhaust date for this NPA, CBT will realize minimal savings because it has already made most changes necessary to implement an overlay in the 513 NPA. Based on NANPA's previous exhaust date of 2Q2003, the Public Utilities Commission of Ohio (PUCO) ordered an overlay for the 513 NPA effective June 29, 2002. On March 14, 2002, the PUCO suspended the overlay. However, CBT had already completed most of the implementation work by that time. The primary costs remaining for CBT to complete the overlay will be switch translations and customer education. Attachment 3 shows the estimated savings that CBT will realize due to the delay in implementation of the overlay. This estimate is based on a 36-month deferral period (i.e., only 36 months of the 39 month deferral fall within a five-year window from the time CBT's recovery period begins (2Q 2003 through 1Q 2008)).

The 859 NPA is scheduled to begin pooling in 4Q 2003. NANPA's current projected exhaust date for the 859 NPA (2Q 2011) does not reflect the impact of pooling. Since any deferral due to pooling will be well outside of a five-year pooling recovery period, CBT assumes no savings due to the implementation of pooling in this NPA.

⁵ As CBT indicated in comments filed on November 6, 2001 in *Number Resource Optimization*, Public Notice, "The Common Carrier Bureau Seeks Comment on the National Thousands-Block Number Pooling Rollout Schedule", DA 01-2419, the decreased demand for NXX codes in the 513 NPA makes it unlikely that the 513 NPA will exhaust before 2Q 2005. Thus, CBT assumes that the maximum impact of pooling in the NANPA analysis for the 513 NPA would be 13 quarters (i.e., 2Q 2005 to 3Q 2008).

VI. EXHIBITS

Attachment 1 is the summary sheet of Number Pooling Modification costs, including Part 32 Accounts and Gross Dollar Investment.

Attachment 2 is a listing of the OSS expenses associated with the automation of processes created by the need to identify, donate, and receive pooled numbers

Attachment 3 shows TBNP annual capital costs, expenses and total project costs - minus savings.

Attachment 4 calculates the TBNP exogenous cost.

Chart 1 shows CBT's Capital Cost Factor calculations

Tariff Review Plan (TRP) show the impact of TBNP exogenous recovery in the Common Line Basket.