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Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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| In the Matter of |) | |
| |) | |
| Long Term Telephone Number Portability |) | CC Docket No. 99-35 |
| Tariff Filings of |) | |
| |) | |
| Pacific Bell |) | Transmittal No. 2029 |
| |) | |

DIRECT CASE OF PACIFIC BELL

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TABLE OF CONTENTS

| | |
|--|---|
| SUMMARY | i |
| 1. The inclusion of a narrative explanation as to how costs were developed in the confidential support data on file. | 1 |
| 2. The itemization of OSS costs, arranged by functional area, and categorized as follows: (1) the total cost; (2) the cost assigned to number portability; (3) the cost allocations among number portability services; (4) an explanation of how each OSS modification relates to performing queries; (5) an explanation of how each OSS modification relates to porting numbers between carriers; (6) an explanation of how each OSS modification relates to any other number portability function; (7) the basis for cost allocations between number portability and non-number portability services; and (8) the basis for cost allocations among number portability services. | 2 |
| 3. An explanation for each OSS modification as to the manner in which it alters the nature of the task or function previously performed and why the alteration is necessary "for the provision of portability." Also, identification of any costs related to revising OSS systems to perform 10-digit translations and a demonstration as to how these costs will not benefit CLASS services, area code overlays or other services. Alternatively, an explanation as to how costs were allocated among services which benefit from the change. | 2 |
| 4. The filing of actual expenditures, including expenditures to date and planned actual expenditures within the recovery period for the number portability costs which have been developed utilizing the CCSCIS and SCIS models. | 3 |
| 5. To the extent that Pacific Bell intends to continue to rely upon cost model results in support of their tariffs they must explain how the use of cost models produce more accurate estimates of the incremental costs generated by number portability that would be produced by an analysis of actual and planned expenditures. In doing so, the LECs must demonstrate the following; (1) that the use of the models does not produce double recovery of embedded costs; (2) a comparison of the models' calculation of average costs of number portability-type queries and the models' incremental costs of these queries; and (3) the total network switching and signaling costs with and without long-term number portability or an explanation as to why the models cannot produce this information. | 4 |

6. Where the LECs continue to rely upon costs derived from cost models and costs produced from an analysis of actual expenditures, identify claimed costs related to land, buildings, administration and maintenance expenses. Costs that were derived either from model output or an allocation factor applied to actual costs should be identified on the basis of the impact the new investment has on overall requirements. With regard to any reprogramming related to 10-digit translation, the LECs must either (1) identify these costs and demonstrate how other services will not benefit from the reprogramming or (2) show how the costs were allocated among the services benefiting from the reprogramming.....7
7. Actual overheads utilizing an approach similar to that employed by Ameritech.....8
8. An explanation as to the bases utilized for allocating number portability costs among services and the reasonableness of the allocation method used. Pacific Bell is to address whether it is reasonable to assign all "implementation costs" to the end-user charge. The LECs are to submit the worksheets described in the *Cost Classification Order* including the allocation of each cost among the number portability services. Assumptions used to allocate costs of shared facilities such as the cost of the shared regional databases and links must be demonstrated.....11
9. Explanation or documentation to support a non-recurring charge for query services, including the identification of additional costs created by billing for default queries on a monthly basis. An explanation as to why these costs are for the purposes of covering costs which result from providing default query services and not recurring costs intended to encourage companies to request prearranged queries.....15
10. An explanation as to the circumstances under which Pacific Bell's monthly nonrecurring charge for database access is to be imposed and a justification for both its necessity and level. The explanation should cover why usage measurement is not feasible and why the proposed charge is an appropriate and reasonable proxy for measured usage. Pacific Bell is also to submit a full explanation and justification for the other proposed "nonrecurring" charge, identified as a cost component of prearranged queries as well as proposed tariff language which will clarify when and under what circumstances this charge will apply.....16
11. An explanation as to why it is necessary to query calls to an NXX where a number has not been ported and why no other alternative exists. Pacific Bell should also explain the differences between its systems and those of other LECs that do not find it necessary to query all calls. There should be a statement as to whether the proposed demand calculations include the following: (1) queries made on intraswitch calls; (2) queries on interswitch calls in NXXs where a number has been ported; and (3) queries made on interswitch calls in NXXs where a number has not been ported.....17

12. An explanation of the methodology used to calculate generic upgrade costs and the allocation of costs between the number portability and non-number portability services.20
13. An explanation as to how prior years costs related to long-term number portability implementation were treated with respect to jurisdictional separations. This explanation should include a demonstration that long-term number portability costs booked in past period and included in the development of federal number portability charges has not been recovered already in the state jurisdictions. Alternative, the LECs should explain how state ratepayers will be made whole if the Commission allows federal recovery of costs assigned to the intrastate jurisdiction and included in the state ratemaking process. Also, the LECs should explain how costs related to long-term number portability implementation will be treated prospectively with respect to jurisdictional separations and how costs included in the development of federal number portability charges will not be recovered in the state jurisdiction.21

ATTACHMENT ANarrative Explanation of Cost Development

ATTACHMENT BOSS Cost Support

ATTACHMENT CActual Expenditures

ATTACHMENT D Capacity Costing and Economic Costs

ATTACHMENT EAffidavit of John J. Del Re

ATTACHMENT FComparison Between CCSCIS Average and CCSCIS
Marginal Model Outputs for Investment per Query and
Cost per query/Costs with and without LNP

ATTACHMENT G Maintenance and Administration Expenses, Building Costs
and Land Costs

ATTACHMENT H LNP Modifications

ATTACHMENT I Generic Software Expense Recovered Through LNP Rate
Elements

SUMMARY

In response to the Order Designating Issues for Investigation, released by the Common Carrier Bureau on February 26, 1999, Pacific Bell submits these responses to the thirteen items identified by the Bureau in relation to Southwestern Bell's local number portability ("LNP") tariff filings of January 15, 1999. In most respects, the information being submitted clarifies the cost data provided as support for these tariffs. However, Pacific Bell is concerned with the Bureau's apparent opposition to Pacific Bell's use of the Common Channel Switching Cost Information System ("CCSCIS") and the Switching Cost Information System ("SCIS") models to identify relevant LNP costs, as well as the use of the unbundled network element ("UNE") overhead factor to determine the incremental LNP overhead.

As described more fully in this Direct Case, the CCSCIS and SCIS models appropriately captures economic costs associated with LNP. These models do not analyze embedded or historical costs. Double recovery of embedded costs does not occur. Rather the models develop forward looking costs based on the fact that increasing capacity utilization today triggers an advancement in network expenses. If the Bureau were to view only actual expenditures as appropriate for cost recovery, its would be adopting a distorted "short run" assessment of the costs directly attributable to LNP. By its very nature, cost tracking can, at most, capture only a small portion of the true economic costs incurred by a local exchange carrier in implementing LNP.

Also, as described in greater detail in the Direct Case, while Pacific Bell has complied with the Bureau's directive that it develop an overhead study similar to that employed by Ameritech, it continues to believe that the calculation of the UNE overhead factor provides the most accurate means for identifying the LNP incremental overhead factor. Not only does such a factor address the Bureau's objective that it reflect a

wholesale offering approach, it has withstood state regulatory review and verification. In addition, double recovery is foreclosed by use of this methodology. Moreover, the approach recognizes a reasonable judgment of forward-looking relationships.

The costs Pacific Bell seeks to recover through its LNP tariffs filings are those LNP costs to which it is entitled under the Commission's Third Report and Order. Pacific Bell believes that this pleading offers further support of this fact.

**Before the
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DIRECT CASE OF PACIFIC BELL

In response to the Order Designating Issues for Investigation, released in this proceeding on February 26, 1999 ("Order"), Pacific Bell files this Direct Case in support of its tariff related to local number portability ("LNP") filed on January 15, 1999 and permitted to go into effect on February 1, 1999.¹ In its Order, the Common Carrier Bureau ("Bureau") identifies thirteen aspects of Pacific Bell's tariff filings requiring further clarification. Each of these factors is identified and discussed fully below.

1. The inclusion of a narrative explanation as to how costs were developed in the confidential support data on file.²

Attached as Attachment A is a line-by-line narrative explanation of Pacific Bell's Chart 1 costs submitted in connection with Pacific Bell's January 15, 1999 tariff filing.

¹ *Long-Term Number Portability Tariff Filings*, CC Docket No. 99-35, *Memorandum Opinion and Order*, DA 99-265 (rel. January 29, 1999) ("Memorandum Opinion and Order").

² Order, ¶ 7.

2. **The itemization of OSS costs, arranged by functional area, and categorized as follows: (1) the total cost; (2) the cost assigned to number portability; (3) the cost allocations among number portability services; (4) an explanation of how each OSS modification relates to performing queries; (5) an explanation of how each OSS modification relates to porting numbers between carriers; (6) an explanation of how each OSS modification relates to any other number portability function; (7) the basis for cost allocations between number portability and non-number portability services; and (8) the basis for cost allocations among number portability services.³**

3. **An explanation for each OSS modification as to the manner in which it alters the nature of the task or function previously performed and why the alteration is necessary "for the provision of portability." Also, identification of any costs related to revising OSS systems to perform 10-digit translations and a demonstration as to how these costs will not benefit CLASS services, area code overlays or other services. Alternatively, an explanation as to how costs were allocated among services which benefit from the change.⁴**

Pacific Bell is proposing to recover only its direct costs for vendor development in connection with Operational Support Systems ("OSSs") that meet the criteria established by the Commission. In each case, the expenses for a specific software package which was included for recovery through LNP rate elements was specified by the vendor to be attributable solely to LNP. The majority of the OSS software that is contained within the cost recovery filing is provided by a single vendor. The total that Pacific Bell spent on LNP projects with this vendor was [REDACTED] during this period. Pacific Bell will spend an additional [REDACTED] in 1999 on one of these software packages for LNP related enhancements. Of this total [REDACTED] in past and planned expenditures, only [REDACTED] has been included in Pacific Bell's tariff filing.⁵ By comparison, over the 1996 through 1998 time period, Pacific Bell spent [REDACTED] for support of all OSS development packages.

³ Order, ¶ 10.

⁴ Order, ¶ 11.

⁵ If the Commission were to grant Ameritech's Petition for Clarification related to the OSS cost issue, this figure would be impacted.

The normal business practice of this vendor in its development of OSS enhancements is to limit each change package to a single type of common upgrade. In this manner, a carrier, such as Pacific Bell, specifies only those enhancements which it requires. Therefore, a carrier that required OSS development for only LNP was not required to purchase unrelated developments as part of a package.

In addition to this OSS software, Pacific Bell spent an additional [REDACTED] with a second vendor on two separate OSS software packages that are a direct cost of providing LNP through mid-1998. Tracking data identified a total of [REDACTED] that Pacific Bell will spend during 1996 through 1999 for these two software packages.⁶

Attachment B sets forth a detailed response to Questions 2 and 3 above. The explanation provided in response to Question 8 below, referencing paragraph 35 of the Order, provides further information as to the basis for cost allocation among number portability services.

4. The filing of actual expenditures, including expenditures to date and planned actual expenditures within the recovery period for the number portability costs which have been developed utilizing the CCSCIS and SCIS models.⁷

The spreadsheet attached as Attachment C includes past, current and planned actual expenditures. These are related to the costs developed from the Common Channel Switching Cost Information System ("CCSCIS") model. There are also costs developed from the Switching Cost Information System ("SCIS") model which reflect the investment in the end office required to launch a query over the SS7 network. The end office costs are a negligible part of the LNP tracked numbers and cannot be uniquely identified without an arduous and lengthy effort. The actual expenses cannot be appropriately compared to the CCSCIS total outputs for the following reasons:

⁶ Again, if the Ameritech Petition for Clarification is granted with regard to the OSS cost issues, the amount may be adjusted accordingly.

⁷ Order, ¶ 19.

- (1) Actual expenditures do not reflect the advancement costs to bring forward the next relief job of the equipment due to the increased demand on the network caused by LNP. The CCSCIS model recognizes advancement costs for Signal Transfer Point (STP) routing functions and the database at the STPs. Only a portion of the links and the LNP database equipment are represented in the actual expenditures even though all of the equipment is being advanced.
- (2) The actual expenditures do not reflect the advancement costs associated with secondary investments. These secondary investments are associated with the advancement costs of central office equipment and are developed through the application of supplemental factors.
- (3) These investments also do not reflect the LNP portion of the shared "waiting to serve" capacity in the SS7 network. This capacity usage is produced in the "average" view of the models.

The validity of the use of CCSCIS and SCIS models is discussed in further detail below in answer to Item 5.

- 5. To the extent that Pacific Bell intends to continue to rely upon cost model results in support of their tariffs they must explain how the use of cost models produce more accurate estimates of the incremental costs generated by number portability that would be produced by an analysis of actual and planned expenditures. In doing so, the LECs must demonstrate the following; (1) that the use of the models does not produce double recovery of embedded costs; (2) a comparison of the models' calculation of average costs of number portability-type queries and the models' incremental costs of these queries; and (3) the total network switching and signaling costs with and without long-term number portability or an explanation as to why the models cannot produce this information.⁸**

Pacific Bell continues to assert that the SCIS and CCSCIS models are the appropriate tools to use to identify costs. Economic costs associated with a query are developed based on the CCSCIS and SCIS models. This software does not analyze embedded or historical costs. Rather, CCSCIS and SCIS develops forward looking costs based on the fact that increasing capacity utilization today triggers an advancement in network expenses. Simply stated, neither CCSCIS nor SCIS is a cost recovery mechanism designed to recover embedded costs. Rather, they are designed to develop

⁸ Order, ¶ 20.

the forward looking economic cost associated with network capacity utilization. Because the models identify the unit costs of each fundamental unit by octet, each service using octets for that piece of equipment will recognize the same cost. Double recovery cannot occur. These unit costs recognize advancing the next job for one unit. Units used for one service are not recognized for any other service.

If the Bureau were to view only actual expenditures as appropriate for cost recovery, it would be adopting a distorted "short run" assessment of the costs directly attributable to LNP. By its very nature, expense tracking can, at most, capture only a small portion of the true economic costs incurred by a local exchange carrier in implementing LNP.

Only one component of LNP costs can be tracked by identifying expenses as they are incurred: LNP Database Investments. A significant portion of costs caused by LNP implementation cannot be tracked immediately, including the cost of using SS7 network capacity to process LNP queries. For example, LNP queries will use a significant portion of capacity of STPs. None of these STP costs, however, have been tracked since no construction jobs have been triggered yet. Nonetheless, such costs are incurred as LNP traffic increases capacity utilization.

Consider, for example, an equipment component with ten units of capacity, four of which are currently used to provide other services. LNP also requires four units of capacity for this same equipment component. Because LNP's use of the capacity of that equipment component is still sufficiently below its total capacity, no construction job is immediately triggered and no cost tracking takes place. The exhaust date of that equipment component, however, is advanced significantly, resulting in an earlier than anticipated capital expenditure. The net present value of the investment cost stream initially associated with this network equipment increases as the exhaust date shifts forward. Although undetected by expense tracking methods, investment costs rise above

expected levels as network capacity originally intended for other uses is diverted toward LNP implementation. This advancement effect, driven solely by LNP, increases local exchange carrier costs and properly should be recognized in determining LNP rates. Attached as Attachment D is a detailed discussion of the capacity costing methodology and how this methodology more accurately recognizes economic costs.

The Bureau should not rely upon incomplete or short-run approaches to measuring costs to determine the cost of implementing LNP. Such expense tracking processes fail to capture a significant portion of the long-run economic costs incurred in implementation. In particular, LNP rates should reflect the economic costs of devoting SS7 network capacity to LNP applications.

Attached as Attachment E is the affidavit of John J. Del Re, Principal Systems Engineer of Telcordia Telecommunications ("Telcordia Affidavit"). This affidavit describes in further detail the validity of the SCIS and CCSCIS models in comparison with a short run approach.

The Bureau has requested a comparison of "average" and "incremental" results utilizing the models. Technically, the term "incremental costs" refers to marginal and average unit costs. For this reason, the table attached as Attachment F offers a comparison of the CCSCIS model's calculation of average and marginal costs. As a further explanation of the relationship, the marginal cost recognizes the per unit cost as if the equipment were being fully utilized at all times. The investment per unit does not take into consideration any "waiting to serve" capacity required even though this is an obvious condition in the industry.

In comparison, the average cost includes both the per unit cost at capacity and the proportional amount of the "waiting to serve" capacity. The LNP cost derived by the model reflects LNP capacity costs and LNP's portion of shared capacity. With regard to database costs, the total cost of the capacity is assigned to LNP because the database is

not utilized for any other service. This characteristic is further discussed in the Telcordia Affidavit.

In order to identify costs without LNP, Pacific Bell used total investment data derived from the CCSCIS model for facilities determined to support LNP. The difference in the CCSCIS costs with and without LNP only reflect the LNP database costs which are dedicated to LNP. They do not reflect the forward-looking advancement costs associated with LNP's use of the existing links, Global Title Translations ("GTTs") or STP terminations shared by all SS7 based services. The comparison drawn does not include costs for the end office utilizing the SCIS model. Because no specific adjustments attributable to LNP were made to the SCIS model calculations, there was no discernable difference which could be drawn under this model on the basis of LNP. Any additional switching investment needed for LNP is reflected in the per unit investment calculations. This comparison is included on a Attachment F.

- 6. Where the LECs continue to rely upon costs derived from cost models and costs produced from an analysis of actual expenditures, identify claimed costs related to land, buildings, administration and maintenance expenses. Costs that were derived either from model output or an allocation factor applied to actual costs should be identified on the basis of the impact the new investment has on overall requirements. With regard to any reprogramming related to 10-digit translation, the LECs must either (1) identify these costs and demonstrate how other services will not benefit from the reprogramming or (2) show how the costs were allocated among the services benefiting from the reprogramming.⁹**

Pacific Bell has identified costs for maintenance and administration, buildings and land through the application of annual cost factors to the investment for each type of equipment listed on Chart 1, Lines 1 through 7 of its January 15, 1999 tariff filing. In addition, attached as Attachment G are the costs derived utilizing cost factors for maintenance and administration, buildings and land. Pacific Bell did not include any end

⁹ Order, ¶ 21.

office or tandem switch costs related to reprogramming switches to perform 10-digit translations.

7. Actual overheads utilizing an approach similar to that employed by Ameritech.¹⁰

Pacific Bell continues to believe that calculation of the unbundled network elements ("UNE") overhead utilizing a shared and common allocator provides the most accurate means for identifying the appropriate LNP incremental overhead factor. In several respects, this calculation meets the expectations of the Bureau. It was designed for wholesale offerings. It has withstood state regulatory review and verification. The Shared and Common Factor, or Common Cost Allocator, for UNEs establishes a relationship between dollars in accounts reflected in UNE studies and dollars in accounts considered shared and common. Double recovery of costs is foreclosed by use of this approach. Finally, the relationship of current dollars, based on accounts, does not reflect embedded costs. It recognizes a reasonable judgement of forward-looking relationships. This approach further recognizes that since quantifiable dollars cannot be associated with certain specified activities, common and shared dollars occur in proportion to the dollars identified in the UNE studies.

Utilization of a Shared and Common Allocator assigns an average amount of shared and common costs of the business to services or elements. Rates that only recover the direct costs without recovering a reasonable portion of the shared and common costs of the business will under recover the incurred costs. Therefore, it is appropriate to apply the relevant shared and common allocator to the direct costs of product.

With regard to its January 15, 1999 tariff filing, Pacific Bell used the TELRIC shared and common allocator. A special study was done to determine this shared and common cost allocator. This allocator is the relationship between forward-looking

¹⁰ Order, ¶ 28.

common costs and directly attributable forward-looking costs. It is comprised of the average amount of shared and common cost per dollar of TELRIC. In identifying the TELRIC average forward looking shared and common costs, all retail costs were removed.

It was Pacific Bell's understanding that a special study, while preferred by the Commission, constitutes only one possible means for determining actual incremental overheads. Since release of the Order, Pacific Bell has endeavored to review the study conducted by Ameritech. Unfortunately, few details are available and, as a result, Pacific Bell has been required to make certain assumptions it believes to be consistent with the study's intent based upon its limited knowledge. However, even if Pacific Bell believed that the Ameritech study correctly isolated the incremental overheads attributable to LNP, it could not duplicate this study within the time allowed for this filing. Pacific Bell agrees.

In developing a special study which Pacific Bell believes to be consistent, but not identical, to the Ameritech study, Pacific Bell utilized a shared and common cost study performed for the purposes of identifying the forward looking shared and common cost allocator for TELRICs. Each work group was examined to determine whether the work group was affected by the implementation of LNP. If the work groups' costs were included in the direct cost portion of the LNP study, the work group was excluded from the LNP incremental cost pool. If a work group was affected by the implementation of LNP and the work group's costs were not included in the direct cost portions of the LNP cost study, the work group's shared and common costs as identified in the study were

included in the LNP incremental cost pool. The work groups included in this study are as follows:

| Account | Comments |
|-------------------------------------|---|
| Product Management | Included in Ameritech Factor - includes associated headcount loadings |
| Account Servicing | Wholesale Account Teams only - includes associated headcount loadings |
| Corporate Strategy | Included in Ameritech Factor - includes associated headcount loadings |
| Comptroller | Included in Ameritech Factor - includes associated headcount loadings |
| Public Policy and Federal Relations | Included in Ameritech Factor - includes associated headcount loadings |
| Legal | Included in Ameritech Factor - includes associated headcount loadings |
| Network Services | Included in Ameritech's Direct Costs - not included in Pacific's direct costs and therefore included in the incremental overheads factor along with associated headcount loadings |

In producing the numerator of the formula ("LNP Overhead "), Pacific Bell removed approximately 60% of its legitimately incurred LNP related shared and common costs.

The formula for calculating the LNP Incremental Overhead Factor was as follows:

$$\text{LNP INCREMENTAL OVERHEAD FACTOR} = \frac{\text{LNP OVERHEAD}}{\text{TOTAL TELRIC COSTS}} =$$



The total TELRIC cost factor is similar to Ameritech's ELRSIC. The only variance between the Ameritech general methodology and the methodology used by Pacific Bell is that Pacific also included costs attributable to wholesale account teams because these teams support CLECs and other carriers impacted by LNP. In addition Network Services costs, which Pacific Bell assumes was captured by Ameritech in its recurring costs, is not

captured in Pacific Bell's recurring costs and therefore is included in the LNP Incremental Overhead Factor.

The LNP Incremental Overhead Percentage derived from this methodology is [REDACTED].

8. **An explanation as to the bases utilized for allocating number portability costs among services and the reasonableness of the allocation method used. Pacific Bell is to address whether it is reasonable to assign all "implementation costs" to the end-user charge. The LECs are to submit the worksheets described in the *Cost Classification Order* including the allocation of each cost among the number portability services. Assumptions used to allocate costs of shared facilities such as the cost of the shared regional databases and links must be demonstrated.**¹¹

In allocating number portability costs to be recovered by the end user charge and the query service charges, two LNP-related functions have been identified: (1) the ability for a customer to change his local exchange provider while retaining his currently assigned telephone number and (2) the ability to complete calls to a ported number.

The ability afforded a customer to retain his telephone number is not a "service"; it is a network capability. The costs for deploying this capability are not recurring nor are they volume or traffic sensitive.¹² The nature of this capability was properly recognized by the Commission in its allowance of the **amortization** of these non-recurring (start-up) costs over a fixed five-year period.¹³

The second functionality is accurately characterized as a "service". The costs associated with this functionality are recurring in nature and, in specified respects, volume and traffic sensitive.

¹¹ Order, ¶ 35.

¹² If this porting capability were a service, its costs would be more properly recovered from the "users" of the service, i.e., the end user who actually port their numbers to another carrier, but this would be contrary to the principle of competitive neutrality.

¹³ In the Matter of Telephone Number Portability, Third Report and Order, 13 FCC Rcd. 11701, 11777 (1998) ("Third Report and Order").

If the costs associated with these two separate, but related, functions were combined under a single number portability rate element, rates would need to be modified once the initial implementation costs were fully amortized. In other words, if the query service rates were designed to recover any portion of the implementation costs ascribed to the first functionality, the rates would need to be reduced after 60 months to reflect the amortization of the non-recurring cost of implementing LNP.

Moreover, all of the measurable benefits of being able to change carriers while retaining the same telephone number accrues to the end user, not to the carrier which utilizes the local exchange carrier's query services. A carrier completing calls to numbers in NXXs designated as number portable incur costs by virtue of the need to query a regional database to secure information before the call can be completed. None of the non-recurring non-volume sensitive "start up" costs of deploying the end user functionality in the local exchange carrier's network are impacted by the query process.

In addition to its inherent inconsistency, if the Commission were to determine that some portion of these non-recurring, non-volume sensitive costs should be recovered from the local exchange carrier's query services, it would place the local exchange carrier at a demonstrated disadvantage in competing with other query service providers. In addition in a price cap environment, it would place the local exchange carrier at risk of not recovering its cost of implementation because of the demand fluctuation with regard to query services. Carriers which would utilize a local exchange carrier's query services would bear a disproportionate share of number portability costs in comparison to other carriers that utilize the query services of other providers.

The method used for the allocation of LNP costs is also reasonable. Pacific Bell's objective in allocating costs to individual rate elements is to place responsibility for related cost recovery on the cost causer. To accomplish this objective, all costs associated with LNP were differentiated based on whether they were recurring or non-

recurring costs. Recurring costs and non-recurring costs were further separated on the basis of whether the type of cost was volume sensitive. This analysis yields the following matrix:

| | <u>RECURRING</u> | <u>NON-RECURRING</u> |
|-----------------------------|------------------|----------------------|
| <i>VOLUME SENSITIVE</i> | Usage | Per Order |
| <i>NON-VOLUME SENSITIVE</i> | Additive | Start-Up |

The cost recovery method identified for each cost category reflects how the cost occurs and the cost causer. For example, the "Usage" category covers costs which are based on the amount of service consumed by the customer. Cost recovery in this instance is deemed to be most equitably handled on a per-usage basis, e.g., per query charge. The "Per Order" category of costs encompasses those costs which occur in connection with service establishment and do not vary based on how much service the customer consumes. Recovery in these situations is based on the number of occurrences, e.g., a non-recurring charge. The "Additive" cost category covers those costs which occur across different groups of customers, all of which share responsibility as cost causers. Such costs are differentiated as Type 1 costs so that they can be added to the appropriate recovery rate elements for each customer group, i.e., end user charge or query charge. The "Start-Up" cost category covers costs which occur in connection with the deployment of new network capabilities and are not generally sensitive to the number of customers which make use of the capability. Such costs are most equitably recovered from potential users of the new network capability regardless of actual subscription, e.g., an end user charge.

In this context, there are two groups identified as "cost causers": (1) the local exchange customers who are able to port their telephone numbers and (2) the N-1

networks that deliver traffic to these customers. Because the measurable benefits of LNP accrue to the local exchange customers served by switches that have been made number portable, Pacific Bell proposes to recover the "Start-Up" costs through the end-user charge.

As a consequence of LNP deployment, N-1 networks become responsible for querying a centralized database on each call they deliver to an NXX designated as number portable by the LERG. This query is to obtain routing information needed to complete such calls regardless of whether or not an end-user has ported his number. Under the Pacific Bell rate design, "Usage" costs associated with these queries recognizes three distinct groups of N-1 networks: (1) the Pacific Bell network ("Group 1"); (2) Other N-1 networks that choose not to perform queries in their own networks and send unqueried calls to the Pacific Bell network requiring Pacific Bell to perform the LNP database query function ("Group 2 "); and (3) other N-1 networks that elect to perform their own queries but choose to utilize the Pacific Bell LNP database to secure routing information ("Group 3"). Each of these groups is addressed using distinct rate elements that recover only those network costs involved in delivering the specific capability utilized by each. For example, for Groups 1 and 2, costs are included in the SPNP Prearranged query charge.¹⁴ Costs may also be assessed against Group 2 under the SPNP Default query charge and costs included in the SPNP Database query charge should be recovered from Group 3.

All networks that access Pacific Bell's LNP database are cost causers with respect to Pacific Bell's Type 1 costs, as well as its costs for deploying Local Service

¹⁴ Pacific Bell imputes to itself the costs of all pre-arranged queries it will make in the course of delivering local exchange calls to NXXs within its network or to interconnected CLEC networks which have been designated as number portable in the LERG.

Management Systems ("LSMSs") and LNP databases. Therefore, these costs are treated as "Additive" costs to the other "Usage" rate element costs.

Finally, customers are charged non-recurring "Per Order" rates to recover one time costs associated with the particular service they order, e.g., the access order charge, SS7 translation charge, and billing charge.

The worksheets requested by the Bureau in this regard are attached as Attachment H.

9. **Explanation or documentation to support a non-recurring charge for query services, including the identification of additional costs created by billing for default queries on a monthly basis. An explanation as to why these costs are for the purposes of covering costs which result from providing default query services and not recurring costs intended to encourage companies to request prearranged queries.¹⁵**

In cases where an N-1 carrier terminates its traffic on the Pacific Bell network and has not prearranged with Pacific Bell to perform the related query, a billing charge will be assessed. This charge is due to the fact that in such situations Pacific Bell is being presented with unanticipated usage (default queries) for which it has no mechanized means of tracking, posting and associating the usage with a customer account.

It is Pacific Bell's position that this charge is non-recurring in nature based on the way these costs are incurred, i.e., each occurrence triggers the same costs for the same activity, regardless of a similar event having occurred in the past or the potential that a similar event might occur in the future. If during some subsequent billing period, even a year later, the same customer again sends default traffic to Pacific Bell's network unqueried and the NXX of the called number is designated in the LERG as number portable, Pacific Bell will incur the same costs of manually handling this unanticipated usage and the corresponding costs of billing the cost causer. The fact that the same customer may have delivered unqueried default traffic sometime in the past has no impact on the manual activity required and the associated costs of this activity.

¹⁵ Order, ¶ 43.

The only way that Pacific Bell can mitigate its costs of tracking, posting and billing a carrier's usage is if the carrier prearranges in advance for Pacific Bell to provide this service. The efficiency of handling query demand on a prospective basis is reflected in the non-recurring charge associated with the SPNP Query-prearranged service. Otherwise, Pacific Bell's systems will not recognize any previous transaction with the carrier and will be forced to perform additional steps to establish an account for the carrier. Unless Pacific Bell is permitted to recover the additional non-recurring costs incurred by carriers making default queries, these carriers have little incentive to act in an efficient manner.

10. **An explanation as to the circumstances under which Pacific Bell's monthly nonrecurring charge for database access is to be imposed and a justification for both its necessity and level. The explanation should cover why usage measurement is not feasible and why the proposed charge is an appropriate and reasonable proxy for measured usage. Pacific Bell is also to submit a full explanation and justification for the other proposed "nonrecurring" charge, identified as a cost component of prearranged queries as well as proposed tariff language which will clarify when and under what circumstances this charge will apply.¹⁶**

The SPNP query service involves a customer's connection to Pacific Bell's SS7 network to access its LNP database. These queries are not associated with a call terminating at Pacific Bell's end office or tandem where a billing record is normally created. Therefore, in order to measure the actual number of SPNP database queries, Pacific Bell would need to be able to record the occurrence of these queries for billing purposes utilizing only the SS7 signaling message. To date, Pacific Bell has not installed the requisite SS7 link monitoring system which would enable it to record these queries from the SS7 signaling message. To do so would involve an investment in excess of [REDACTED]. Pacific Bell is currently in the process of reviewing the feasibility of this approach.

¹⁶ Order, ¶ 44.

Given this inability to measure actual usage, Pacific Bell developed its flat charge as a surrogate for its monthly usage rate¹⁷ based on the following formula. First, the five year forecast for Database Queries was multiplied by the charge per query (\$0.00022). This result was then divided by sixty months to determine the average monthly revenue. The monthly revenue from all SPNP database queries was then divided by the average number of customers subscribing to the service to arrive at the flat charge filed in the tariff for the SPNP Database query service, i.e., \$1,821 per customer, per month.

This flat charge for the SPNP database query service will apply each month to each customer which subscribes to the service until Pacific Bell acquires the capacity to record actual usage. Once Pacific Bell is logistically able to do so, it will charge a customer a usage sensitive rate, on a per-query basis, for all types of queries.

11. **An explanation as to why it is necessary to query calls to an NXX where a number has not been ported and why no other alternative exists. Pacific Bell should also explain the differences between its systems and those of other LECs that do not find it necessary to query all calls. There should be a statement as to whether the proposed demand calculations include the following: (1) queries made on intraswitch calls; (2) queries on interswitch calls in NXXs where a number has been ported; and (3) queries made on interswitch calls in NXXs where a number has not been ported.**¹⁸

Pacific Bell's proposed billing for queries related to NXXs where LNP has been made available as opposed to tying the billing only to those NXXs where a number has actually been ported relates to the simple position that it should be permitted to bill for queries conducted on behalf of other carriers, at the time that these queries occur. Carriers have requested that all Pacific Bell NPA-NXX codes in LNP capable switches be opened for portability. In addition, they have further requested that all future codes in these targeted offices be made LNP capable as the codes are opened within 45 days after the LERG is published or after the First Usage Notification ("FUN") message from the

¹⁷ Pacific Bell SPNP Tariff filing, FCC No. 128, ¶ 13.3.16(E)(2)

¹⁸ Order, ¶ 46.

NPAC. In order to accomplish this industry-required objective, translations have already been input as part of the testing and deployment process for all of the Phase I through Phase V MSA switches. A change in Pacific Bell's tariff at this late date would necessitate the removal of routing translations for thousands of NXXs in hundreds of switches, only to have to input and test these switches again at the time the first number ports. In addition, to test at the time of the first number ports doubles the translation and testing work, costs and introduces another chance for errors associated with NXX code opening. In other words, each new NXX code would require initial routing translations and testing when the code is first opened in the LERG and later, additional routing translations and testing when the first number is ported.

Pacific Bell is aware that some incumbent local exchange carriers are opening the codes within five days after the FUN message. Under this process, however, the local exchange carrier could not perform queries for which the carriers are billed until after the five day period. In the opinion of Pacific Bell, there are inherent risks in such a process related to the foreseeable inability to open the code within this time period. If the call is not properly queried at the originating office or in the serving tandem, then all calls to ported numbers must be routed through the donor switch resulting in impermissible post dial delay. This consequence seemingly would be in violation of the Commission's rules relating to service degradation.¹⁹ Potential service failures are also possible when a call is not properly queried at the originating office or in the appropriate serving tandem office. For example, if the donor switch is an analog switch and the recipient switch is a digital switch to which a customer has ported to obtain ISDN, some services may fail when routed through the donor switch. Moreover, if a large port occurs and calls are not properly queried and are routed to the donor office, blocking may occur if the calls exceed the trunking and/or SS7 link capabilities of the donor office.

¹⁹ 47 CFR § 52.23.

As Pacific Bell has repeatedly demonstrated, five days is not adequate to perform the processes required to activate querying in multiple switches. The Service Activation/Assurance processes to open an NPA-NXX in an end office or tandem switch includes translating the switch, opening the code and then testing the LRN routing from each office and tandem to the ported switch. This process is currently being performed, as the industry agreed, pursuant to the Southwest Region LNP NPA-NXX Code Opening Process. There currently is no switch translation methods and procedures which would allow the local exchange carrier to translate the switch, open the code and test the LRN and then turn off the code until the first live order notification is received. In other words, the translations must be removed if it is to be turned off.

For this reason, demand calculations made by Pacific Bell include queries on interswitch calls to NXXs where a number has not been ported and queries on interstate calls in NXXs where a number has been ported. It does not include queries made on intraswitch calls.

It is necessary to begin translations well before the first number ports in an NPA-NXX order to ensure that the first order can properly complete within the five day period. These queries are required in order to meet the competitive local exchange carriers' demands that number portability be made available in all NXXs in selected offices. However, it is possible to initiate query billing after a live number port; this billing would include costs attributable to queries necessitated by the carrier prior to the first number being ported. The estimated cost to implement this billing practice is [REDACTED]. [REDACTED]. If ordered to do so, the estimated timeline for implementing this change would be 24-26 weeks.

12. An explanation of the methodology used to calculate generic upgrade costs and the allocation of costs between the number portability and non-number portability services.²⁰

Pacific Bell has incurred costs for generic software upgrades on virtually every platform deployed in its network as a result of number portability requirements, generic software in a switch is much like the operating system in a personal computer in that it interacts with every application but is not partitioned or separable by application. The question then is how a local exchange carrier can determine what portion of the underlying operating system (generic software) should properly be allocated to LNP.

Pacific Bell adopted an approach which first discounted the total cost of generic upgrades in connection with implementing the LNP capability by an amount equal to the costs of the required generic upgrades which were contracted for prior to the Commission's Second Report and Order in CC Docket No. 95-116.²¹ Next, each switch platform was evaluated on a switch by switch basis to determine if there were any other reasons for upgrading the generic package other than LNP. Where another application was found to be the basis for the need to upgrade the generic software release, the total cost attributable to this particular upgrade was eliminated from consideration as an LNP-related cost.

The total cost of the generic software upgrades related to each switch type, once calculated as specified above, was divided by the number of switches where LNP had either been implemented or it was anticipated LNP would be implemented within the recovery period pursuant to bona fide requests. The amount determined for 1999 was based on actual switches converted, the amounts for successive years were based on forecasts. Attachment I is a breakdown of these costs by switch type.

²⁰ Order, ¶ 48.

²¹ In the Matter of Telephone Number Portability, Second Report and Order, 12 FCC Rcd. 12281 (1997).

- 13. An explanation as to how prior years costs related to long-term number portability implementation were treated with respect to jurisdictional separations. This explanation should include a demonstration that long-term number portability costs booked in past period and included in the development of federal number portability charges has not been recovered already in the state jurisdictions. Alternative, the LECs should explain how state ratepayers will be made whole if the Commission allows federal recovery of costs assigned to the intrastate jurisdiction and included in the state ratemaking process. Also, the LECs should explain how costs related to long-term number portability implementation will be treated prospectively with respect to jurisdictional separations and how costs included in the development of federal number portability charges will not be recovered in the state jurisdiction.²²**

LNP costs incurred by Pacific Bell prior to February 1, 1999 were accounted for in accordance with Part 32, the Uniform System of Accounts for Telecommunications Companies, and Part 36, Jurisdictional Separations Procedures, of the Commission's Rules as well as Generally Accepted Accounting Principles. The Commission's Third Report and Order in CC Docket No, 95-116²³ states that incumbent local exchange carriers number portability costs are not subject to jurisdictional separations. Since the federal cost recovery mechanism for Pacific Bell did not commence until February 1, 1999, the LNP costs were not excluded from the separations process prior to that date.

While LNP costs incurred prior to the February 1, 1999 effective date of Pacific Bell's LNP tariffs were not excluded from the separations process, these costs also have not been recovered in intrastate rates. California has not had a general ratemaking proceeding where the total intrastate costs have been subject to ratemaking in 1997 or 1998. Pacific Bell is subject to a Price Regulation with Sharing plan, which went into effect January 1, 1990 and was modified October 8, 1998 to suspend sharing. Under this non-rate of return plan, there is a form of capped rates for local exchange services. Moreover, the rates allowed under these alternative regulation plans would not have included LNP costs. Market based rates for new/restructured services have been

²² Order, ¶ 51.

²³ *Third Report and Order*, 13 FCC Rcd. 11701, 11720.

established in some states, but those rates have not been based on the use of cost factors that would have been affected by historic LNP costs.

It is clear given prior Commission rulings²⁴ that the costs of LNP cannot be directly assigned to the interstate jurisdiction. These rulings state that the use of direct assignment is allowed only where specifically provided in the Commission's rules or where explicitly required by a Commission Order. Neither the Third Report and Order nor any subsequent order on LNP costs state specifically that these costs are to be directly assigned to interstate, only that they are to be excluded from jurisdictional separations.

Therefore, Pacific Bell is excluding these costs from jurisdictional separations starting with the effective date of its LNP tariffs, February 1, 1999. The associated interstate revenues will also be excluded since it would be inappropriate to exclude the costs and leave the revenues in the interstate jurisdiction. Beginning with the reports filed on April 1, 2000 for the 1999 reporting period, these costs and revenues will be included in the "All Other Adjustments" column of the ARMIS 43-01 and not included in

²⁴ Letter of Interpretation, Clarification of the Role of Direct Assignments in the Jurisdictional Separations Process, AAD-91-48, 6 FCC Rcd 5068 (Com. Car. Bur. 1991). Also, Memorandum Opinion and Order, In the Matter of Applications for Review of the Common Carrier Bureau's Letter of Interpretation Regarding the Clarification of the Role of Direct Assignment in the Jurisdictional Separations Process, AAD-91-48, 8 FCC Rcd 1558 (1993).

the "Subject to Separations" amounts shown on that report. The LNP costs will therefore not be part of the jurisdictionally separate results and will not be shown in either the interstate, or intrastate jurisdiction.

Respectfully submitted,

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April 5, 1999

**ALL OF THE ATTACHMENTS
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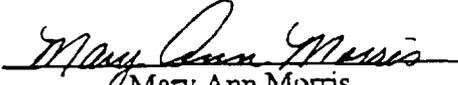
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Certificate of Service

I, Mary Ann Morris, hereby certify that the foregoing "Direct Case of Pacific Bell Telephone Company" in CC Docket 99-35, Transmittal No. 2029 has been served on April 5, 1999 to the Parties of Record.


Mary Ann Morris

April 5, 1999