BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Application of the *Nebraska Telephone Association* on behalf of its membership seeking authority to install a statewide North American Numbering Plan establishing 1+ Ten Digit Long Distance Dialing in Nebraska.	Application No. C-1014 GRANTED Entered: December 20, 1993

APPEARANCES

For the Nebraska Telephone Association

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BY THE COMMISSION

On July 22, 1993, the Nebraska Telephone Association (the "NTA") on behalf of its members filed this application asking the Commission to approve the implementation of a 1+ ten digit dialing system for all long distance calling in Nebraska. Notice of the application was published in the Omaha Daily Record July 26, 1993. No one protested or intervened in the application. Notice of the application was also sent to the Omaha World Herald, the Lincoln Journal, and the Lincoln Star on July 28, 1993. Notice of hearing was sent to the NTA's counsel on August 31, 1993. The Commission further took the step of issuing a press release September 16, 1993 describing the application and sent it to news organizations around the state. A front page article about the application appeared in the Lincoln Star on September 21, 1993. Hearing on the matter was held October 13, 1993 in the Commission Hearing Room, 300 The Atrium, Lincoln, Nebraska with appearances as shown.

O P I N I O N A N D F I N D I N G S

TESTIMONY

At the outset, we observe that the primary feature of the current numbering system used for long distance calling is a uniform length telephone number and a series of area codes called Numbering Plan Areas ("NPAs") to indicate geographic destinations. This "North American Numbering Plan" ("NANP") uses a 1+ seven digit telephone number to dial long distance

within the caller's "home" NPA ("HNPA"). The addition of an area code before dialing seven digits permits the caller to place a long distance call to a "foreign" NPA. If this application is granted, callers will have to dial 1+ or 0+ the area code + seven digits (i.e., 1+ or 0+ ten digits) to place a long distance call regardless of the home or foreign NPA distinction and 1+ or 0+ seven digit dialing will no longer be possible to place a long distance call.[1]

Peggy Nownes testified on behalf of the NTA. Nownes is the Director for Product and Market Issues at US West Communications, Inc. ("US West"). Her job responsibilities include active participation on product teams for specific products and services provided by US West. She is routinely involved in the strategic and operational decisions concerning these services and represents US West before regulatory agencies. Nownes has worked 24 years for US West in various departments and managerial positions, including the business office, network organization, and carrier marketing.

Nownes testified that her testimony was designed to provide to the Commission background and information supporting the approval of an Interchangeable NPA ("INPA") dialing plan in Nebraska. In order to explain INPA, Nownes first described the dialing codes associated with this plan, i.e., NPA codes and Central Office ("CO") codes. An NPA dialing code is a three digit number (commonly referred to as an area code) in which the middle digit is always "1" or "0". With CO codes, the middle digit is never "0" or "1". For example, Nebraska has area codes of 402 and 308 and Iowa has 712, 515, and 319. Examples of CO codes in Lincoln include 471, 474, and 476. Simply stated, it is the middle digit of either code that has historically distinguished an NPA code from a CO code. If the second digit contains a "0" or "1", it is an NPA code; if the second digit contains a "2" through "9", it is a CO code. However, with "interchangeable" codes, carriers and customers will no longer be able to distinguish NPA codes from CO codes because the the same three digits can be used as either an NPA code or a CO code.

The NTA is proposing the INPA for Nebraska because of a shortage of area codes nationally. In 1947, the NANP was adopted as a numbering scheme for identifying subscriber stations and their locations on the public switched network. The NANP provides ten-digit telephone numbers consisting of three

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[1] In the rest of this order, reference to "1+" dialing includes both "1+" and "0+" dialing.

ing of three elements: (1) three digit Area Code or NPA, (2) three digit Central Office Code, and (3) a four digit Station Number. The NANP uses a seven-digit telephone number made up of a CO code and a Station Number (seven digits) to call within a local area, 1+ seven digits to call within the HNPA, and 1+ ten-digits for calling a "foreign" NPA area (normally outside the LATA or state boundary). Today, the supply of NPA codes available for assignment across North America is nearly exhausted. Regulators and telephone officials have known for some time that there is a need for more NPA codes in light of the increasing number of access lines. To address the system's overload, a plan was developed by the NANP Administrator making NPA codes "interchangeable" with central office codes and thereby increase the number of usable NPA codes.

Under the new plan, using CO codes as area codes will create an additional 640 NPA codes for use nationwide, as opposed to today's 144 NPA codes (of which 139 have been assigned with the five remaining numbers already reserved for use before 1995). Additionally, this plan increases the number of central office codes available for assignment by 144.

The public has historically dialed 11 digits for calls to another NPA location, i.e., 1+ a ten digit telephone number. The industry therefore agreed that, to minimize customer confusion, this 11 digit dialing pattern should be maintained in a post-INPA environment. The 11 digit dialing arrangement will therefore continue in use for all toll calls destined to another NPA, which includes most interstate toll calls and all intrastate toll calls to another intrastate NPA. For example, a call from Lincoln to Chadron or from Lincoln to Chicago will continue to be made by dialing the 1+ ten digit dialing pattern currently in use.

The dialing pattern for calls within the "home" NPA will be the major change if this proposal is adopted. In most areas, intraNPA toll calls have been dialed using eight digits, i.e., 1+ seven digits. However, under the NTA's proposal, the traditional method of distinguishing between CO codes and area codes ceases since a particular three-digit code will be usable as either. As a result, a "prefix method" is used to distinguish between area codes and central office codes. The prefix method requires that area codes always be preceded by a "0" or "1", while central office codes are never preceded by a "0" or "1" prefix. In effect, the prefix method requires customers to dial 1+ or 0+ ten digits on all long distance calls, even those within the customer's "home" NPA.

Nownes also testified about alternatives to the 1+ ten digit dialing plan. Only one other dialing arrangement is technically feasible: a customer dials intraNPA toll calls in the same way as dialing local calls by dialing seven digits.

This approach enables customers to make intraNPA toll calls with fewer digits, but callers cannot distinguish local calls from long distance calls. Also, seven-digit dialing creates a timing delay in the central office while the network awaits the first three digit's dialing sequence to determine the call's destination. Conversely, if a call is preceded by a "1" or "0", it is immediately recognized as a toll call and routing begins instantaneously. Another problem with seven digit dialing is that step-by-step switches cannot process a seven digit toll call without the 1+ prefix. Therefore, any step-by-step switch operating after 1995 will have to use 1+ ten digit dialing even if all other switches use the seven-digit plan. Finally, customer confusion will be a major factor across the region and nationwide should seven digit dialing be adopted with the HNPA.

In the US West region, 13 state commissions have approved the 1+ ten digit dialing plan and Arizona, Washington, Oregon, and Idaho have already implemented it. Experience in those states shows that customers readily adapt to dialing area codes on all long distance calls. Prior to conversion, nearly 80 percent of the customers indicated that knowing if a toll charge would apply was important to them. Large business customer groups expressed a preference for 1+ ten digit dialing for several reasons: (a) the toll indicator precludes "surprises" appearing on their bill, (b) 1+ ten digit dialing insures Customer Premises Equipment-based toll restriction is still workable; allowing customers to continue using programmable telephones which block outgoing toll calls, and (c) a consistent dialing scheme across the region is maintained.

On March 4, 1992, the National Association of Regulatory Utility Commissioners[2] ("NARUC") adopted a resolution in favor of the INPA prefix method recognizing the need for the introduction of INPA in order to provide additional NPA codes. Nownes further testified that a uniform numbering policy is essential to the efficient operation of a nationwide telephone network. The incompatible assignment of new NPA or CO codes to different areas of the country would be wholly inconsistent with the notion of uniform national numbering. Customer confusion is bound to result from different dialing patterns in different geographic areas. Currently, customers across the country know that dialing "1+" or "0+" means they are dialing a toll call or will reach an operator to assist in placing a toll call. To assign dialing codes which are differ-

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[2]The Nebraska Public Service Commission is a member of the NARUC.

ent or inconsistent with other states, either on an area or state basis, will be confusing. The approval of the INPA plan and prefix method[3] virtually assures that customers understand every long distance call they make must begin with "1" or "0" and include the NPA code, whether it is an intrastate or interstate call.

Technical changes required to implement the INPA include replacement of some central offices (for example, the Number 3ESS switches), generic upgrades, and feature packages in electronic stored program control offices. In some cases, hardware, including memory, will be required to accommodate the new generic packages. Translations will be required in offices to begin a "permissive dialing period," during which time customers can dial HNPA toll calls as either 1+ ten digit calls or as 1+ seven digit calls just prior to the INPA implementation. Additional translation work will be necessary upon implementation of INPA to end the permissive dialing period and for interception of 1+ seven digit dialed numbers after the permissive period ends. Once the permissive period is over, all calls dialed as 1+ seven digit calls will trigger an announcement stating that the carrier cannot complete a long distance call unless 1+ ten digits are dialed. Finally, operational support systems may require upgrading to accommodate INPA telephone numbers.

In terms of cost for these operational and network changes, Nownes testified that in regard to US West's network changes, there are some other Feature Group D installations going into place at the same time and US West is taking advantage of the opportunity to install these various changes together with the INPA. Commissioner Gay asked if these changes were expensive enough to consider raising rates. Nownes answered that she did not believe so and that is not US West's intention because the INPA plan is occurring nationwide. There is no indication that US West will change rates as a result.

At the hearing, the NTA recommended that the INPA be implemented in Nebraska by January, 1995. With the approval of 1+ ten digit dialing by this Commission, INPA could be implemented in Nebraska in the third quarter of 1994.

To adequately inform customers about the dialing changes, Nownes described a customer education process utilizing television and newspaper advertising and telephone bill inserts. The majority of the media campaign will concentrate in the

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[3]Hereafter, reference to INPA includes the prefix method.

period just prior to the implementation of the 1+ ten digit dialing plan.

Nownes summarized her direct testimony by stating that with the shortage of available area codes, implementation of the INPA is imperative for continued, uniform long distance calling consistent with the dialing plan being adopted nearly everywhere else in the United States. Adoption of this plan also gives customers a dialing pattern which retains the toll indicator with which they are now familiar.

If the INPA is adopted, Nebraska customers will dial as follows: (a) seven digits for all local calls, and (b) for all long distance calls, customers will dial 1+ ten digits whether they are calling within their own area code or to another area code.

On cross examination, Nownes testified that the North American Numbering Plan when set up in 1947 established uniform numbering and dialing plans across what is called the World Zone 1 Region (which includes the United States and Canada). The FCC oversees the North American Numbering Plan and will probably determine who will administer the NANP. The FCC has not acted regarding 1+ ten digit dialing, leaving these planning choices to the states. Nownes stated she understood that there are still some states which have not yet decided what plan to adopt but a majority have approved the 1+ ten digit dialing upon petition to each state's utility commission.

If no change is made in the current dialing plan, dialing to other states outside of Nebraska will be difficult because of the introduction of INPA in other states. For example, a caller trying to call Texas will experience difficulty because of the interchangeable NPA and CO codes.

On the other hand, adopting 1+ ten digit dialing leaves toll restriction as a viable option. The adoption of area codes for all long distance calling will not interfere with the use of toll restriction because of the continued application of the "1+" prefix before dialing toll calls. Conversely, adoption of the seven-digit plan (without use of "1+") would create a problem in toll restriction because absent the "1+", a switch cannot determine whether a call is a long distance or a local call. This would also cause billing concerns not just for businesses, but for everyone because of the difficulty in knowing whether a particular call is local or long distance. If the Commission orders a seven-digit plan, and the 1+ is dropped, there is no way for a customer to be sure whether or not the call is long distance or local. Further, if a caller placed a call from, for example, Lincoln to Omaha under the seven digit plan, the switch must wait for the first three digits to be dialed. There is a a 4.5 second delay while the

switch determines how to route the call. 4.5 seconds does not seem especially long, but US West forsees many such callers in a seven digit environment wondering whether their call is going through and in many instances they will probably hang up and try again. So a seven digit dialing plan will leave customers trying to understand what is happening with their calls, why are calls on their bill being charged as long distance instead of local and vice versa, and why does "1+" dialing not work when it works everywhere else? From US West's perspective, the bottom line is that 1+ ten digit dialing will clearly indicate to customers what is a toll call and what is a local call.

Nownes also testified about the impact of the proposed 1+ ten digit dialing plan on Extended Area Service Plans. Nownes agreed with the Communications Department Staff's (the "Staff's") analysis that under the 1+ ten digit dialing plan, a customer would still dial seven digits to make an EAS call that is currently a local call. The seven-digit calling, as it is today, will remain the same. If that EAS customer dials 1+ ten digits mistakenly, he or she should get a recording explaining that the long distance digits are not needed to complete the call. So there will be no toll charge. A derivative of the EAS plan is Lincoln Telephone's ELCA plan. The NTA's counsel was asked to confirm with that company whether adoption of the INPA would negatively impact upon the ELCA plan. According to a letter filed by the company December 3, 1993, adoption of the INPA will not have an impact since the ELCA plan is dependent upon differentiating between flat rate and measured rate calls using the 1+ prefix.

If the INPA plan is adopted, there will be a four month permissive dialing period for dialing either 1+ ten or 1+ seven digits for toll calls within the HNPA. At the end of the permissive dialing period, callers dialing 1+ seven digits will get a recording stating that an area code must be dialed also. The reason for recommending the permissive dialing period is because (a) it gives customers a chance to get used to dialing under the new plan so that they won't be frustrated and, with the ongoing advertising of the change, uninformed, and (b) this time period gives businesses a chance to reconfigure some of their individual PBXs and to install toll restriction if they wish.

Nownes testified that US West and the NTA believe an order from the Commission without the permissive dialing period is not in the best interest of the calling public.

Nownes also confirmed that the NTA's membership supports this application. As far as the removal of step-by-step switches and upgrading to new equipment, Nownes testified that US West will convert its step-by-step switches by the end of 1994

and that these conversions are in its construction plan regardless of this application. There will be no additional costs to local customers if 1+ ten digit dialing is implemented. However, if seven digit dialing is implemented, a company's step-by-step switch will have to be replaced at a cost to that particular telephone company.

Seven digit dialing exists primarily in California's , New York's, and Illinois' metropolitan areas. In places such as Los Angeles, New York City, and Chicago, "zone calling" is in place based on usage and distance. In these areas, because they are already on zone plans, the seven digit dialing concept is viable. Such plans have been in effect for so long using seven digit dialing that the particular state commissions are keeping seven digit dialing for those metropolitan areas. Some states will have a combination. Primarily, the New York, Los Angeles, and Chicago areas will have seven digit within their metropolitan areas and 1+ ten digit outside of them. But the majority of commissions have adopted 1+ ten digit dialing on a statewide basis.

Norm Osland, President of the NTA, also testified in support of the application. Osland stated that he heard and agreed with the content of Peggy Nownes' testimony and that there is uniform support for this application among NTA's membership. In regard to the absorption of cost to implement 1+ ten digit dialing by the telephone industry, Osland stated that Nebraska is highly digitalized already. Those companies not yet totally digitalized are speeding towards that point. Digitalization is a tremendous asset and by adopting the 1+ ten digit dialing plan, much of the expenditure that would be required with the seven digit dialing plan is avoided. Seven digit dialing would be rather chaotic for the companies with older switches. With adoption of the INPA plan, most companies expenditures will be minimal. Osland stated it is unlikely that a company could use the adoption of the INPA plan to justify a rate increase. The NTA membership does not anticipate 1+ ten digit dialing driving the companies to rate increases.

Osland concluded by stating that all of the companies are committed to educating the public about using 1+ ten digit dialing. He described public information packages for upcoming use including newspaper, direct mail, and other methods. In terms of customer satisfaction, Osland gave his opinion that customers will probably prefer 1+ ten digit dialing simply from the standpoint that it identifies to the customer whether a call is a long distance or local. Osland said that chaos would result among the public with replacement of the current 1+ seven digit dialing with just seven digits.

There have been historically many dialing changes. Customers went through a dialing change where everyone used to just dial four digits to make a local call. That changed to five and then to seven. Basically, there is an adjustment period, but customers generally adapt very well. Osland commented on the general intelligence of customers and stated he believed the adoption of 1+ ten digit dialing will not cause great difficulty among the public.

DISCUSSION

Article IV, Sec. 20 of the Nebraska State Constitution provides that the Commission's powers and duties ***"shall include the regulation of rates, service and general control of common carriers as the Legislature may provide by law. But, in the absence of specific legislation, the Commission shall exercise the power and perform the duties enumerated in this provision."***

With passage of LB 835 (LAWS 1986), subsection (1) of Neb. Rev. Stat. §86-803 (Reissue 1987) states that ***"Except as provided in sections 86-801 to 86-811, telecommunications companies shall be subject to regulation by the commission."*** Subsection (6) provides that the Commission ***"shall retain quality of service regulation over the services provided by all telecommunications companies and shall investigate and resolve subscriber complaints concerning quality of telecommunications service, subscriber deposits and disconnection of service."***

Nothing in LB 835's partial deregulation of telecommunications companies precludes the Commission from determining whether the public interest requires the establishment of an INPA dialing plan. As noted in the previous paragraph, except as specifically provided in §§86-801 to 86-811, the Commission's authority to otherwise regulate telecommunications companies, including local exchange carriers, remains. The Nebraska Supreme Court held in State ex. rel. Spire v. Northwestern Bell Telephone Co., 233 Neb. 262, 445 N.W.2d 284 (1989), ***"LB 835 does not totally divest the PSC of jurisdiction over telecommunications companies, completely preclude the PSC's regulation of telecommunications companies, or transfer regulatory control to a government agency, body of government, or branch of government, except the Legislature."***

Neither LB 835 nor the supreme court's decision in Spire overrules the court's previous holding in Marquis v. Polk County Telephone Co., 100 Neb. 140, 158 N.W. 927 (1916): ***"It [the Commission] is granted power and duties which include the regulation of rates, services, and general control of common carriers as directed by the Legislature. In a field where the Legislature has not acted, the commission is author-***

ized to exercise the powers and perform the duties enumerated in the constitution." Since LB 835, the Commission's rate-setting authority has been largely removed; its general regulatory authority still remains, including its regulation of quality of telecommunications service to telephone customers. See the supreme court's observation in Spire: ***"The act (LB 835) preserves the Commission's regulatory jurisdiction regarding quality of service and entry into the telecommunications market and, therefore, does not divest the Commission of its regulatory power over telephone companies."*** 233 Neb. at 279. Whether to implement the proposed INPA dialing plan is a quality of service issue for this Commission to determine.

We find the implementation of the proposed INPA dialing plan to be consistent with maintaining an efficient telecommunications system in this State. Even while deregulating, the Legislature declared in §86-801 ***"that it is the policy of the State to:. . . (2) maintain and advance the efficiency and availability of telecommunications services."*** As testified to by Peggy Nownes and Norm Osland, there are few alternatives to maintaining the current system in light of impending NPA shortages. With continued access growth, there can be no doubt that the shortage of area codes is a substantial threat to the efficiency and availability of telecommunications services.

Maintaining the status quo is not a realistic alternative; the lack of available NPA codes is not going to disappear. An inconsistency between states in placing long distance calls is certainly not efficient, either. 1+ seven digit long distance calling cannot continue if the calling public is to enjoy a viable telecommunications structure in this State and connection of that structure to the national and international telecommunications network. Seven digit dialing is not viable either; the use of "1+" or "0+" to signify a toll call as opposed to a local call is an inherently valuable service, albeit an indirect one, to callers. We are also sensitive to the importance of toll restriction features. There do not appear to be any good alternatives to maintaining toll restriction under a seven digit dialing plan. And, again, we are sensitive to the fact a seven digit dialing plan would be largely out of step with the INPA dialing plan being implemented around the country. These are compelling reasons to adopt the INPA proposal in Nebraska. To do otherwise will not improve the telecommunications system in Nebraska. In fact, to do otherwise will not even maintain the current level of quality.

The implementation of the INPA plan means that all long distance calls regardless of state boundaries, LATAs, exchange boundaries, or distance must be dialed with "1+" or "0+" ten digits. That is a simpler, more efficient method of placing toll calls than any other solution to the lack of available

area codes. Being fully advised, we find that the public interest is best served by ordering all local exchange carriers to implement the proposed INPA plan effective September 18, 1994 with an optional permissive dialing period starting May 4, 1994. All local exchange carriers should be instructed to adequately inform their customers of this new dialing plan through a public education campaign of the type described by Nownes and Osland in their testimony.

O R D E R

IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that all local exchange carriers in this State implement an Interchangeable Numbering Plan Area Code Dialing Plan requiring that all long distance calls be dialed either "1+" or "0+" an area code + seven digits.

IT IS FURTHER ORDERED that this INPA plan be instituted by all local exchange carriers with an optional permissive dialing period starting May 4, 1994 with the plan to become permanent September 18, 1994.

IT IS FURTHER ORDERED that the local exchange carriers adequately inform their customers of the new INPA dialing plan through a public education campaign.

MADE AND ENTERED at Lincoln, Nebraska this 20th day of December, 1993.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING

Daniel G. Urwiller

Duane D. Gay

//s//Rod Johnson
//s//Frank E. Landis, Jr.
//s//James F. Munnelly

Frank Landis

Chairman

ATTEST:

Executive Director