

APPENDIX C

Katrina LATA Edit Learnings Applied to NNP

The NPAC LATA edit precluding porting outside the LATA was suspended during Hurricane Katrina to allow for porting as a vehicle to move telephone numbers where some level of service was available. Certain subscribers encountered challenges when attempting to reach ported numbers, while other ported subscribers were unable to originate calls.

Beyond relaxing the NPAC LATA edit, it is not clear whether any changes were made to switch software releases or routing configurations as part of the disaster mitigation approach. A coordinated industry test could clarify to what extent configuration changes in existing networks and systems can support NNP.

The destruction caused by Hurricane Katrina put more than 3 million telephone lines out of service in the three states. There was extensive damage to wireline switching centers and interconnection trunks. Thirty-eight 9-1-1 call centers were disabled. Wireless networks also sustained considerable damage with more than 1000 cell sites out of service. Wireless switching centers were damaged as well.

In the Southeast NPAC Region, approximately 2000 telephone numbers were ported across LATA boundaries after Hurricane Katrina. Additionally, about 300 blocks of existing numbers were moved across LATA boundaries using number pooling. The 300 blocks that were moved using pooling represent up to 300,000 telephone numbers. The pooled blocks contained both working and vacant numbers.

About one quarter million customers were ported across LATA boundaries using individual number porting or block pooling. Additionally, the incumbent RBOC used Advanced Intelligent Network (“AIN”) service to provide temporary service to approximately 600 telephone numbers.

The following challenges were identified:

- After porting, wireless numbers had originating service and some terminating service.
- Wireless users with their home switch out of service could not receive calls since terminating calls routed through the home switch but the HLR was out of service.
 - This would not be a factor for NNP given switching equipment is all functioning normally and moving the number creates a new home location where the subscriber can be served from that switch or register as a roamer/traveler in another area.
- Wireline (non-VoIP) numbers had no originating service but had the ability to forward calls to a different terminating service or voice mail.
 - This would not be a factor for NNP given the switching equipment of the recipient service provider is functioning normally.
- The key question is whether the recipient service provider can provision a customer with a telephone number having an outside office code.

- A coordinated industry test could clarify if the recipient service provider could provision that number, terminate calls and messages to it, and, whether it is possible to originate and route all necessary services.
- Calls from wireline subscribers in the donor LATA that are served by the RBOC did not complete normally as RBOC equipment currently does not carry traffic across LATA boundaries.
- Similarly, calls from locations outside the affected LATA that are default routed to the RBOC in the donor LATA will fail for the same reason.
- Also, in some cases 9-1-1 PSAP call backs failed due to the same RBOC LATA boundary limitation.
 - A coordinated industry test could determine whether this is due to inherent switch software limitations or due to configuration data that could be changed to support NNP.

Other NNP considerations:

- Calls routed to IXC's were not observed to fail however billing records were generated when the call should be treated as local. This causes billing confusion that must be resolved. The potential for billing confusion on NNP calls that turn out to be local and vice versa exist for any NNP solution approach.
- Relaxing the "out of LATA" edit in the NPAC creates the potential for numbers not associated with NNP to be ported accidentally to other parts of the NPAC region. Erroneous ports can occur today. This scenario would trigger the same corrective actions for snapping back to the donor service provider.
- Trunk groups sized for lesser volumes overloaded during the disaster resulted in the unavailability of the required trunk facility. This would not be a factor for NNP given the switching equipment will be engineered, as per current practice, to service the forecasted traffic.