

# NMPRC and Telecommunications Networks in New Mexico

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September 18, 2008

# Overview of Current Telecommunications and Broadband Infrastructure in NM

- The NMPRC has maps of ILEC service territories, but ILECs are not required to supply maps of their networks to the NMPRC.
- NMPRC Staff has collected various government, private, and ILEC network maps, but has not compiled the information into a single map.
- The NMPRC does not have a clear idea of the status and location of much of the telecommunications and broadband infrastructure in New Mexico. Some information is gleaned indirectly through ILEC (Qwest and Windstream) quality of service reports, Qwest's SASA, and consumer complaints.
- The FCC has service coverage maps of the wireless carriers. Wireless coverage area maps are provided to the NMPRC Consumer Protection Division for assistance with some consumer complaints. Wireless coverage areas in New Mexico are not integrated into a single map.

# Overview of Current Telecommunications and Broadband Infrastructure in NM

- Qwest and Windstream have quality of service rules applicable to basic and designed services, rural ILECs do not. FCC regulates wireless and broadband quality of service.
- Quality of Service rules for ILECs (Qwest and Windstream) are designed so that price cap carriers have an incentive to invest in their networks or face penalties if they fail the performance benchmarks contained in those quality of service rules.
- Theory: rate of return companies have incentive to invest in their networks to earn a guaranteed return on that investment, price cap carriers have an incentive to underinvest in their networks to earn a greater return on investment.

# Directions for Infrastructure Improvement over the Next 5 Years

- Three methods of finding out the state of a carriers network; 1) quality of service metrics, 2) broadband studies and infrastructure mapping, 3) competition studies that include quality of service information.
- First, one must know the state of the state's network before improvements can be recommended.
- Broadband "initiatives" underway in 39 states, 10 states are actively undertaking broadband mapping efforts (see CostQuest handout).
- Two congressional bills, H.R. 3919 and S. 1492, propose a national broadband strategy for mapping broadband in the states and identifying needs. H.R. 3919 has moved to the Senate. S. 1492 is out of Senate committee and is to be heard by the full senate.
- NM initiative consists of study being conducted by Design Nine to explore a New Mexico Integrated Broadband Initiative. According to Design Nine, study to be completed this week.
- Primary purpose of mapping efforts is to uncover broadband coverage "gaps". Once gaps are identified, then explore ways of funding broadband expansion in the uncovered areas.
- Emergence of broadband as an "essential" service and economic driver.
- Continue quality of service monitoring of carriers who are price cap regulated.

# Directions for Infrastructure Improvement over the Next 5 Years

- Competition study can help identify level of coverage in state for telecommunications services, and also broadband. Focuses on services offered.
- NMPRC under internal review to consider funding for a competition study.
- Many other states fund competition studies to assist in regulating telecommunications services (ex. CA, OR, WY, OK, MI, VT, NY, TX).

# Impediments to Overview of Infrastructure and Infrastructure Improvements

- Both broadband and competition studies require planning and funding. Broadband and competition studies are required in many states through legislative mandates.
- Telecom and broadband providers, and state and federal agencies consider some network information to be “sensitive” for competitive and/or security reasons. Some information must be treated as confidential. Creates an issue with who can see the information, and what can be revealed to the public.
- Once “gaps” or “needs” are revealed, the issue of a strategy for funding “needs” must be explored. Filling of “gaps” or “needs” may mean subsidization.
- Availability of broadband does not mean take rate. Many cannot afford broadband, and some may not want it, or have other broadband alternatives available (ex. satellite). Universal broadband service means availability at a price that everyone can afford, eventually.

# Conclusion

- PRC has expressed a great deal of concern over the provisioning of basic local exchange service and more advanced services for health, safety, and welfare reasons, and also over concern for the economic development of communities in New Mexico.
- PRC realizes the disparities between investment and services in some rural areas vs. urban areas. Advanced services “haves and have-nots”.
- PRC is interested in investigating methods by which local exchange and advanced services may be provisioned to a larger percentage of New Mexicans, and to New Mexicans in more rural areas.
- NMPRC is exploring the possibility of a competition study to help identify where the “gaps” are in the provisioning of basic local exchange, and high speed data services in the state of New Mexico, and for appropriately regulating different types of telecom carriers in different areas of the state.

# Appendix - The History of Wireline Networks in New Mexico

- Telecommunications was all about (plain old telephone service) POTS Service until early 80's.
- Where Mountain Bell and GTE (large ILECs) could afford to and were willing to build out their networks, they did.
- Rural Telephone Cooperatives (rural LECs) filled in the gaps in those areas where GTE and Mountain Bell did not serve. Low cost financing through the Rural Utility Service (RUS).
- All NM ILECs are obligated to provide “continuous and adequate service and shall not discontinue, reduce, or impair service” (NMSA 63-9-7).
- All NM ILECs required to file and obligation to serve tariff, which describes the ILECs obligation to serve for local exchange service at no charge to the customer (ex. within 1,000 ft of a distribution terminal, after 1,000 ft, ILEC can charge customer for additional cost to serve). RUS obligations creates a stronger obligation to serve on rural ILECs due to terms of RUS loans.
- No other specific obligation to serve tariff obligations on ILECs beyond POTS service.



# Appendix - The History of Wireless Networks in New Mexico

- Wireless Networks first arrived in New Mexico in 1980's. One carrier per service territory as certificated by the NMPRC.
- State regulation over rates, terms, and conditions of service, and quality of service (NMSA 63-9B).
- FCC preempts state regulation over rates, terms, and conditions of service, and quality of service generally. Federal competitive market designation for wireless services. Multiple cell phone provider entrants as costs of providing service are reduced.
- NMPRC Consumer Protection Rule (17.11.16 NMAC) applies in part to wireless carriers in addition to Qwest.

# Appendix - History of Advanced Services Networks in New Mexico

- Advanced switch based services, in particular for businesses, in place and evolving throughout 1980's and 90's, (ISDN, Frame Relay, PBX and private line and special access services).
- Arrival of IP-based services and internet to the masses in 1980's.
- Broadband services primarily interstate and FCC regulated. NMPRC opts not to assert jurisdiction over DSL services (Megabits case).
- VoIP both telecommunications and information services. NMPRC seeking to collect state universal service monies from VoIP providers who are not currently paying into the Fund (ex. Vonage). Complaint for Declaratory Judgment at the NM District Court (CASE NO. 6:08-CV-00607-CG-RHS).

# Appendix - Local Exchange Competition and the Federal Telecom Act of 1996

- Federal Telecom Act of 1996 allowed ILECS to sell interstate long distance services in their own territories in exchange for allowing Competitive Local Exchange Carriers (CLECs) to lease portions of the ILECs networks and/or resell ILEC services. Qwest obligated under federal law to “open its network to competitors”.
- Qwest’s Performance Assurance Plan (QPAP) is a wholesale quality of service plan developed at the NMPRC (Case No. 3269) to monitor Qwest’s service to CLECs and provides for the payment of penalties to CLECs and the state for non-compliance with specific wholesale performance measures.

# Appendix - Eligible Telecommunications Carriers (ETCs) in New Mexico

- A carrier must receive ETC designation in order to receive federal universal service fund monies. Certification must first be approved through a state commission before a telecom carrier's federal designation can be given.
- All ILECs in New Mexico, and some other competitive ETCs (several wireless and one CLEC) have ETC designation in New Mexico.
- ETCs must certify annually (Oct 1) with the NMPRC, and the NMPRC to the FCC, that the carrier is using federal universal service fund monies for the purpose of universal service fund support in their territory.
- NMPRC rule 17.11.27.8 (Reporting Requirements for ETCs) requires carriers in their annual certification reports to the NMPRC to detail the investments in support of universal services for the past year, and investment plans for the next year and approximate expenditures in support of those investments.

# Appendix - Qwest Second Settlement Agreement (SASA)

- SASA the result of Qwest underinvestment of approximately \$240 M in AFOR 1. \$255 M investment agreement by parties (AG, PRC Staff, GSD, NMIPA) modified and approved by the Commission in Case No. 06-00325-UT. The Commission determined the \$255 M owed is Qwest ratepayer money to be reinvested in Qwest's network.
- \$255 M investment over 3 years as of Jan 1, 2007 in 5 major categories; high speed data services, interoffice fiber, cable improvements, advanced network projects, and network augmentation (Sections 4(a-e) of SASA).
- Qwest files quarterly progress reports on SASA investment. A mid-term report on SASA investments is due on Oct 1, 2008, and a final report at the end of the SASA. Mid-term penalties built into SASA should Qwest invest less than 90% of investment as specified in section 4 of the SASA.
- Information on Qwest's SASA and SASA reporting can be found in the Commission's website at <http://www.nmprc.state.nm.us/tb.htm?panel=1#examples>.

# Appendix - Qwest's Rural Extension Fund (REF)

- Fund created in 1980's by the NMPRC as the result of a tax windfall for carriers. REF created in lieu of rate reductions to Qwest (then Mountain Bell) customers. \$2 M/Yr placed into REF. Used for the purpose of funding local exchange service beyond Qwest's tariffed obligation to serve (1,000 ft from distribution pedestal).
- Commission in Case No. 05-00181-UT increased the funding per line from \$15,000 to \$25,000.
- Commission in Case No. 05-00466-UT terminated Qwest's obligation to fund the REF \$2 M annually.
- Original maximum balance in Fund of approximately \$16M now reduced to \$10M as of June 2008 as the result of providing contributions to the cost of providing local service beyond the 1,000 foot distribution point.

# Appendix - Other NMPRC Rules related to Network Investment

- 17.11.17 NMAC, Infrastructure and High Speed Data Services Rule, applies to all ILECs in NM. Purpose of the rule is to ensure adequate investment in telecom infrastructure to support local exchange and high-speed data services, and that quality of ILECs networks are upheld.
- Provides for capital investment requirements for distribution plant, interoffice transmission facilities, switching plant, and facilities to enable the deployment of high speed data services.
- ILECs must submit reports annually describing the ILECs compliance with the rule.

# Appendix - Other NMPRC Rules related to Network Investment

- NMAC 17.11.18, Interconnection Facilities and Unbundled Network Elements, purpose is to facilitate the provision of local exchange services by prescribing the means of interconnection by local exchange carriers, and the means of unbundling of ILEC networks, and establishing quality of service standards for ILEC wholesale services.
- All ETCs (who include all ILECs), and CLECs who are not ETCs are required to provide access to 911 emergency services under NMPRC rules.