

MEMORANDUM

Date : October 31, 2008

To : The Commission
(Meeting of November 6, 2008)

From : Helen M. Mickiewicz
Assistant General Counsel

Subject: Filing of Comments in Response to FCC's Notice of Proposed Rulemaking regarding Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering, WC Docket No. 08-190

RECOMMENDATION: The Commission should file comments in response to the *Notice of Proposed Rulemaking (NPRM)*, adopted and released September 6, 2008 by the Federal Communications Commission (FCC). In the *NPRM*, the FCC seeks comment on whether to collect certain ARMIS service quality and infrastructure information on an industry-wide basis, thus potentially subjecting all telecommunications and broadband providers to the same reporting requirements. Staff recommends that the CPUC support continuation of certain ARMIS reporting requirements and as well as extension of these requirements to all facilities-based broadband and telecommunications providers. Comments are due November 14, 2008.

BACKGROUND: In its *Memorandum Opinion and Order (MO&O)*, adopted September 6, the FCC granted conditional forbearance from the obligation to file Automated Reporting Management Information Systems (ARMIS) Reports 43-05, 43-06, 43-07, and 43-08 (collectively the ARMIS service quality and infrastructure reports).¹ The forbearance applies to all carriers currently subject to these reporting requirements. At the same time, the FCC issued an *NPRM*

¹ *In the Matter of Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering; Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) From Enforcement of Certain of the Commission's ARMIS Reporting Requirements; Petition of Qwest Corporation for Forbearance from Enforcement of the Commission's ARMIS and 492A Reporting Requirements Pursuant to 47 U.S.C. § 160(c); Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) From Enforcement of Certain of ARMIS Reporting Requirements; Petition of Frontier and Citizens ILECs for Forbearance Under 47 U.S.C. § 160(c) From Enforcement of Certain of the Commission's ARMIS Reporting Requirements; Petition of Verizon for Forbearance Under 47 U.S.C. § 160(c) From Enforcement of Certain of the Commission's Recordkeeping and Reporting Requirements; Petition of AT&T Inc. For Forbearance Under 47 U.S.C. § 160 From Enforcement of Certain of the Commission's Cost Assignment Rules; WC Docket No. 08-190; WC Docket No. 07-139; WC Docket No. 07-204; WC Docket No. 07-273; WC Docket No. 07-21; Memorandum Opinion and Order, FCC 08-203, adopted September 6, 2008.(MO&O). See Appendix A for a description of the four ARMIS reports under consideration.*

seeking comment on whether this information should continue to be collected but on an industry-wide basis rather than just from particular classes of carriers.

We also recognize, however, that the Commission has continually sought to ensure that it has access to the data necessary for its public safety and broadband policymaking, and that certain infrastructure and operating data might be useful, but only if collected on an industry-wide basis. We therefore seek comment on whether such data should be collected from all relevant providers in furtherance of those goals. In addition, certain service quality and customer satisfaction data might be useful, but only if collected on an industry-wide basis. Therefore, we seek comment on whether the Commission should collect such data on an industry-wide basis.²

Pending the outcome of this *NPRM*, the FCC has ordered carriers currently filing the physical infrastructure and operating ARMIS reports 43-07 and 43-08 data to continue to report this information to the FCC for two years.

The ARMIS reports under consideration in the *NPRM* were adopted in 1990, when the FCC shifted to a price cap regulation system for the larger incumbent LECs.³ “In the *Price Cap Order*, the Commission established these ARMIS reports in order to monitor two potential concerns raised by price cap regulation: first, that carrier might lower quality of service, instead of being more productive, in order to increase short term profits; and second, that carriers might not spend money on infrastructure development. In response to these possibilities, the FCC created ARMIS reports that would serve as safety nets and provide the FCC and the states with information to determine whether the FCC’s and the states’ regulatory goals concerning quality of service were being met. The FCC adopted ARMIS Reports 43-05 and 43-06 to collect service quality and customer satisfaction information. In addition, ARMIS Reports 43-07 and 43-08 were established to collect infrastructure and operating data. In adopting those new ARMIS infrastructure reports, the FCC found that information on plant in service is a good indicator of investment in service quality.”⁴

Over the years since the 1990 Order the FCC has pared down the reporting required as part of these reports, and on September 6, 2008, adopted the *MO&O* conditionally eliminating these four ARMIS reports all together (with a few exceptions to parts of 43-08) but seeking comment, as noted above, on whether some or all of these reporting requirements should be retained if extended to all telecommunications and broadband providers. The FCC initiated this *NPRM* to determine whether and how to collect such information across all relevant platforms.

² *MO&O*, ¶ 1.

³ *Policy and Rules Concerning Rates for Dominant Carriers*, Second Report and Order, CC Docket No. 87-313, 5 FCC Rcd 6786, para. 2 (1990) (*Price Cap Order*).

⁴ *MO&O* at ¶ 2.

DISCUSSION AND RECOMMENDATIONS:

Scope of Information Collected

CPUC staff have made a thorough review of all the reporting elements in the current ARMIS reports 43-05, 43-06, 43-07 and 43-08, and identified the data worthy of retention if extended to cover the entire industry. Staff recommends that the CPUC urge the FCC to collect the following data from industry:

1) Service Quality and Customer Satisfaction Data

Staff partially agrees with the FCC's tentative finding that it should continue to collect the service quality and customer satisfaction data in ARMIS Reports 43-05 and 43-06 as these data "may be useful to consumers to help them make informed choices in a competitive market" if available from all facilities-based providers of broadband and telecommunications.⁵ Staff also believes that this information would be useful to the state commissions who must ensure that these providers are providing high quality service in their states. Staff, however, does not recommend retention of all six tables of ARMIS Report 43-05. Rather, staff recommends that the FCC only retain the following information collected from these two ARMIS reports and extend it to all relevant players:

- **ARMIS Report 43-05 -- Service Quality**
 - **Table I and Table II** (Combine into one Table): Installation and Repair Intervals for access customers (*e.g.*, switched access, high-speed access and other special access) and Installation and Repair Intervals for business and residential local service. Extend to comparable equipment in service for other voice providers.
 - **Table IV and Table IVA**: Total Switch Downtime covering number of switches, switches with downtime, scheduled and unscheduled downtime for occurrences under two minutes. Occurrences of Two or More Minutes Duration. Extend to comparable equipment in service for other voice providers.
- **ARMIS Report 43-06 -- Customer Satisfaction Survey**

2) Infrastructure and Operating Data

Staff also agrees with the FCC's conclusion that infrastructure and operating data would be useful to the FCC's public safety and broadband policymaking.⁶ These data are key indicators of investment in and deployment of the facilities necessary to sustain a first rate high quality and secure communications infrastructure. Staff also believes that the information in ARMIS Report 43-07 will help consumers make informed choices in a diverse and dynamic market. Staff recommends that the CPUC support retention of the following data collections and an extension of the collections to all facilities-based broadband and telecommunications providers.

⁵ *Id* at ¶ 35.

⁶ *Id* at ¶ 34.

- **ARMIS Report 43-07 -- Infrastructure.**
 - **Table I:** Quantities of local switches according to type, *e.g.*, electromechanical or digital stored program control, and by capability, *e.g.*, equal access and ISDN. Extend to comparable equipment in service for other voice providers.
 - **Table II:** Transmission Facilities (interoffice facilities and loop plant, with categories for copper, fiber, analog and digital carrier, and radio technologies.) Extend to comparable equipment in service for other voice providers.

- **ARMIS Report 43-08 -- Operating Data**
 - **Table II:** Switched Access Lines in Service -- suitably modified to be industry-wide, Table II would cover all access lines in service (switched, routed or non-switched)
 - **Table IV:** Telephone Call Statistics by State -- suitably modified to be industry-wide would collect data regarding telephone calls from every provider, whether wireless or wireline, and whether TDM or IP-based.

Staff's rationale for the continued collection of the data identified above on industry-wide basis, is, as the FCC indicates, to make the information more useful for consumers, industry participants, and policy-makers for purposes of making choices, or for input into policy decisions in and about a diverse and dynamic market for voice services and broadband access. These data are necessary if the FCC and the states intend to evaluate whether carriers are providing high quality service, meeting public safety goals, and actively and uniformly deploying broadband networks. Further, policymakers need this information in order to evaluate whether market conditions are competitive and to what degree such competition exists. The point of collecting data is to inform the FCC and policy-makers elsewhere about "competitive market conditions" – specifically, whether market conditions *are* competitive and to what degree. Absent accurate data about whether service quality, infrastructure deployment, and operating data across the entire telecommunications industry is working for consumers in practice, the ability of policy makers to effectively perform such an evaluation will be critically impaired.

In addition, arming consumers with information about the communications industry has been the approach the CPUC has taken in its Consumer Protection Initiative and is the result of the URF rulings. This philosophy is in line with the FCC's statement that for consumers "to make truly informed choices, consumers would need to have the relevant service quality information from all of the relevant providers."⁷ In its *NPRM*, the FCC indicates that "any such data collection would gather this information from all facilities-based providers of broadband and/or telecommunications".⁸ Staff agrees that limiting the data collection to the ILECs would provide an incomplete, and thus inaccurate, view of the market and industry performance. As the FCC indicates, the data at issue in the *NPRM* should be industry-wide if it is to retain its informational

⁷ *Id* at ¶ 12.

⁸ *Id* at ¶ 34.

relation to consumer protection, and value to a public interest in robust competition and sound broadband policymaking.

Further, the FCC is the proper authority to collect genuinely “industry-wide” data in the reportable categories at issue here. Given the character of the data in question, and its scope, the FCC is the only agency that can collect such data on a national, uniform – thus easy-to-use – basis. Only the FCC is in a position to collect data “from all facilities-based providers of broadband and/or telecommunications” within the country.

If industry-wide data is to be collected, as staff recommends it should be, only the FCC is in a position to do so efficiently and uniformly and make it readily available to the public, the industry, and the states. The point is to make communications data collection impartial and consistent across the communications industry.

Mechanism for Collecting Information:

The FCC seeks comment on how best to collect this information from all facilities-based broadband and telecommunications providers. Staff urges the Commission to make the following recommendations to the FCC.

The FCC tentatively concludes that it should collect the infrastructure and operating data through Form 477.⁹ Staff does not oppose the FCC’s tentative conclusion that the FCC should collect the infrastructure and operating data through Form 477. However, as the FCC notes in the same paragraph, carrier-specific Form 477 data is treated as confidential, whereas ARMIS carrier-specific information is generally publicly available. Staff therefore supports the same process as is used today. All carriers and facilities-based providers would file ARMIS reports with FCC for these service quality reports and infrastructure and operating data reports (via the Tables specified, with the appropriate modifications to be provider- and technology-neutral). This collection would be in addition to data collected via Form 477.

If the FCC decides to collect the infrastructure and operating data through Form 477, staff recommends that the CPUC urge the FCC to make carrier-specific information available to the public even if it is collected as part of Form 477. At the very least the FCC should make carrier-specific information available to state commissions on a readily accessible basis.

Data collection requirements should be tailored to the technology used, and to the service quality and infrastructure issues of that technology -- only then can such data have the maximum usefulness as a federal consumer education tool and as a sound basis for public safety and broadband policymaking. The same facilities are being used to provision a plethora of services, most of which assume broadband capabilities and rely on IP-based applications. The scope of data collection should reflect this fact.

Staff is recommending that the FCC collect this formation by modifying the ARMIS reporting instructions to accommodate other industry providers beyond the LECs currently surveyed. For

⁹ *Id* at ¶ 36.

instance, in the case of Report 43-05 Table II, references to “ILEC” will have to be replaced with “provider” or “reporting provider.” In the reports as they stand today, the FCC often uses “reporting carrier” in place of “ILEC”. In 43-05 Table IV, data collection will have to be untethered from switches so that the information collected covers “routed” traffic. The FCC’s definition of downtime is “complete loss of all call processing capability”. This language can readily be applied to traffic other than switched traffic. The same definition can encompass routed and wireless traffic. A variation of that language – “complete loss of all *access* capability” – can be used to track downtime for broadband services. Further, the instructions for Table IV-A in ARMIS Report 43-05 list downtime associated with a variety of factors including software design, hardware design, hardware failure, acts of God, traffic overload, environmental factors, external power failure, massive line outage, etc. – all categories of failure that are equipment and provider-neutral.

Many of the current service quality and infrastructure reports have no apparent relevance to wireless telephony. For example, many if not most ARMIS service quality and infrastructure measures pertaining to wireline carriers seem inappropriate for wireless carriers due to the obvious differences in technology. For instance, measures of installation time, while important for wireline carriers, who may take several days or more to install basic service, are usually unnecessary for wireless carriers. Similarly, individual out-of-service intervals do not have much relevance for wireless carriers because their outages are based on tower outages or dead spots and are not an individual customer repair issue.

Nevertheless, as with wireline out-of-service intervals, outages for wireless are an important element of service quality, network health, and public safety. Under its policy of regulatory symmetry the FCC should not turn a blind eye to these measurements for wireless simply because of its traditional association with wireline carriers. It is clear that wireless telephony brings with it a comparable set of issues, where coverage, dropped calls, blocked calls (“system busy”), and reception are much more critical issues for customers than for wireline carriers. The CPUC therefore should urge the FCC to adopt data collection language that captures outage circumstances across the industry, including wireless and VoIP. ARMIS infrastructure reporting should capture, for instance, tower outages and other downtime of wireless carriers, as well as broadband outages that impede or make VoIP calls impossible to place or complete.

Finally, staff recommends that the FCC adopt the same on-line filing system set up for ARMIS reporting today. By requiring the filings from all facility-based providers, and filing on-line with an annual filing frequency, the costs to carriers are unlikely to be disproportionately burdensome. Whatever burdens data collection represents going forward will be proportionately shared industry-wide and borne by all.

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APPENDIX A

Summary of Relevant ARMIS Reports

1. *ARMIS Report No. 43-05 (Service Quality)*. ARMIS Report No. 43-05 provides information on the quality of service of the network, pursuant to section 43-21(g) of the Commission's rules. Report 43-05 is filed by all price cap incumbent LECS (both mandatory¹⁰ and elective) at the study area and holding company levels.¹¹ The report contains the following tables:

- Table I Installation and Repair Intervals for access customers (*e.g.*, switched access, high-speed access and other special access)
- Table II Installation and Repair Intervals for business and residential local service
- Table III Common Trunk Blocking Statistics
- Table IV Total Switch Downtime covering number of switches, switches with downtime, scheduled and unscheduled downtime for occurrences under two minutes
- Table IV-A Occurrences of Two or More Minutes Duration
- Table IV Service Quality Complaints by MSA and non-MSA

2. *ARMIS Report No. 43-06 (Customer Satisfaction)*. ARMIS Report No. 43-06 provides the results of customer satisfaction surveys on residential, small business and large business customers' service experience under price-cap regulations, pursuant to section 43-21(h) of the Commission's rules. Specifically, this report contains the number of customers surveyed and the percentage that are dissatisfied with various aspects of the reporting carrier's service. Report 43-06 is filed by all mandatory price cap ILECs at study area and holding company levels.¹²

3. *ARMIS Report No. 43-07 (Infrastructure)*. ARMIS Report No. 43-07 provides data regarding the switching and transmission infrastructure of the reporting carrier, pursuant to section 43-21(i) of the Commission's rules. Report 43-07 is filed by all mandatory price cap ILECs at the study area and holding company levels.¹³ The report contains the following two tables:

- Table I Switching Equipment provides quantities of local switches according

¹⁰ AT&T, Qwest, and Verizon are mandatory price cap incumbent LECS.

¹¹ <http://www.fcc.gov/wcb/armis/instructions/#4305>.

¹² <http://www.fcc.gov/wcb/armis/instructions/#4306>.

¹³ <http://www.fcc.gov/wcb/armis/instructions/#4307>.

to type, *e.g.*, electromechanical or digital stored program control, and by capability, *e.g.*, equal access and ISDN. Table I also provides counts of access lines served by the various switch types and capabilities.

- Table II Transmission Facilities contains information on interoffice facilities and loop plant, with categories for copper, fiber, analog and digital carrier, and radio technologies.

4. *ARMIS Report No. 43-08 (Operating Data)*. ARMIS Report No. 43-08 provides operating data about the public network, pursuant to section 43-21(j) of the Commission's rules. Report 43-08 is filed by all Class A ILECs (large and mid-sized)¹⁴ at the operating company level.¹⁵ The report contains the following tables:

- Table I.A - Outside Plant Statistics - Cable and Wire Facilities contains various cable and wire facility statistics by state.
- Table I.B - Outside Plant Statistics - Other contains various outside plant statistics.
- Table II - Switched Access Lines in Service contains counts of central office switches and switched access line statistics by state.
- Table III - Switched Access Lines in Service by Customer contains switched and special access line statistics by state.
- Table IV - Telephone Calls contains telephone call statistics by state.

¹⁴ Large and mid-sized Class A ILECs earns revenues of \$138 million or more. *See* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-08-929A1.pdf.

¹⁵ <http://www.fcc.gov/wcb/armis/instructions/#4308>.