

Telephone Service Outages and Infrastructure Needs

Customers Lose Telephone Service after Rain Storms

In December 2010 California had the highest monthly statewide rainfall in more than a century. By mid-December, statewide rainfall was above normal. Then, the last week of December, a massive storm pummeled the state, especially southern California, bringing the monthly total to nearly 10 inches, the highest statewide monthly rainfall since 1889 (with some variation by location), according to weather officials. By December 23rd, the Governor had declared a state of emergency for 12 counties: Tuolumne, Kern, Orange, Riverside, San Bernardino, San Louis Obispo, Tulare, Kings, Los Angeles, Santa Barbara, Inyo, and San Diego (see Attachment A).

As rain soaked the California landscape, more than 100,000 customers of AT&T and Verizon lost landline telephone service, many for two or three weeks, leaving them unable to call 911, make other calls or connect to the Internet. At the peak, at least 79,000 AT&T customers and 30,000 Verizon customers were without landline telephone service. Even as the companies dispatched extra resources to restore service, and a week or more after the rain stopped, an extraordinary number of customers continued to report a loss of service. By the last few days of January, a month with only 30 percent of normal rainfall, the companies had brought the number of customers out of service down to a level typical in the normal course of business. During this time, the companies had provided some customers with call forwarding to a working line or wireless telephones. Attachment B (AT&T) and Attachment C (Verizon) shows the companies' progress in restoring service to customers, as reported to the California Public Utilities Commission (CPUC).

Public Safety and Customer Impact of Outages

Prolonged and widespread service outages create a serious threat to public safety because when customers lose landline telephone service they lose the most reliable way to call 911 in an emergency. Moreover, loss of telephone service for even one day – let alone weeks – disrupts daily life and impacts jobs and economic activity, creating financial losses for individuals and businesses. With an ever-growing number of customers getting Internet service through the same line as voice telephone service, loss of service on that line means being “unconnected” – unable to access email, operate an on-line business, attend an online college class, pay bills, fill a prescription, order merchandise, apply for a job or any of the many other activities regularly conducted online every single day.

In addition, competitive local exchange carriers (CLECs) that lease facilities from incumbent local exchange carriers (ILECs) such as AT&T and Verizon are unable to serve their end users when outages occur. Pursuant to interconnection agreements, ILECs are required to pay CLECs penalties when the lines are not working. However, for network outages due to circumstances beyond their control, the ILECs may avoid these penalties by invoking a “force majeure” provision in the agreements. AT&T invoked this provision effective December 16th through January 15th for all CLECs in California and Nevada. Verizon invoked the provision effective December 22nd to potentially relieve it of paying penalties. In the meantime, CLECs have to accommodate their end users and provide assurances of service reliability in order to maintain customers.

Maintaining the Copper Network

According to telephone network technical experts, the portion of the telecommunications network that is most susceptible to damage from massive rainfall is copper plant buried underground. Copper wires, especially the kind typical in old service areas, require special routine maintenance to keep out moisture that causes trouble conditions leading to outages. Newer technologies, such as fiber optics, typically deployed in order to provide customers video and high-speed Internet access, as well as voice service, are much more resistant to water damage.

The ever-growing customer demand for broadband and access through a single pipe to a bundle of services (voice, data, video and Internet) may create an incentive for carriers to prioritize deployment of fiber over maintenance of old copper plant. On the other hand, copper facilities remain useful for voice-only service and also are useful in providing some advanced services, such as digital subscriber line to facilitate broadband and ethernet over copper for small business applications. CLECs rely heavily on leased copper lines to provide data and other services to their business customers. Thus, despite emphasis on deployment of new broadband technologies, maintaining existing copper facilities is essential to a reliable telecommunications network.

Service Quality Standards

A telephone corporation that provides local exchange service is required by statute to “furnish and maintain adequate, efficient, just and reasonable service necessary to promote the safety, health, comfort and convenience” of its customers (Public Utilities Code Sec. 451). The CPUC is required to enforce this requirement and reasonable statewide service quality standards regarding network technical quality, customer service, installation, repair and billing (Public Utilities Code Sec. 2897). One of the CPUC’s service quality standards is out of service (OOS) repair time – the amount of time a customer is without dial tone and unable to make or receive calls before a repair is made.

The current standard for OOS repair time is in General Order (GO) 133-C, which the CPUC adopted in July 2009. GO 133-C specifies that a telephone corporation should restore service within 24 hours for at least 90 percent of residential and small business customers who lose

service. Carriers are required to file quarterly reports with the CPUC showing on a monthly basis what percent of customers had service restored within 24 hours. Sundays and federal holidays and repairs delayed due to customer requested appointments are excluded from the calculation. In addition, a carrier may exclude a month with maintenance delays due to circumstances beyond its control, including a “catastrophic event” (any event in the carrier’s service area for which there is a declaration of a state of emergency by a federal or state authority) or a “widespread service outage” (an outage affecting at least 3 percent of a carrier’s customers statewide).

Reports filed by AT&T and Verizon for the first three quarters of 2010 show that neither carrier met the OOS standard of restoring service within 24 hours for 90 percent of customers, even after allowed exclusions were made (see Attachment D). Carriers are required to file reports for the fourth quarter of 2010 by February 15, 2011.

CPUC Enforcement Action for Inadequate OOS Repair Time

Historically, a telephone company’s general rate case enabled the CPUC to evaluate service quality and ensure that the company made sufficient investment in infrastructure and workforce to maintain a reliable network and adequate service. These expenses were then recovered through rates. However, the state’s four largest carriers – AT&T, Verizon, Frontier and SureWest – now set prices for services without a rate case, and the CPUC’s scrutiny of investment in operations and maintenance is diminished. Company reporting on compliance with service quality standards and customer complaints are now the CPUC’s primary means of monitoring service quality.

GO 133-B, in effect through 2009, required carriers to report on nine service quality standards, including the number of “trouble tickets,” a report generated when a customer lost dial tone or experienced other trouble on a line. GO 133-B did not include a separate measure for OOS repair time. However, the CPUC has deemed OOS repair time to be an “extremely significant” aspect of service quality and “one that merits our specific attention” and has imposed fines and penalties when a carrier repeatedly fails to meet OOS standards.

In 2001, in a complaint case filed by the Division of Ratepayer Advocates (DRA), the CPUC found that the average OOS repair time for residential customers of AT&T (then Pacific Bell Telephone Company) had increased 45% from 29.3 hours in 1996 to 42.5 hours in 2000. The decline occurred during the exact time the CPUC had ordered AT&T to maintain service quality as a condition of approving the merger between Pacific Bell and Southwestern Bell Company. The CPUC held: “The sharp decline in service quality of nearly 50% over a mere four years, coupled with Pacific’s knowledge thereof and its lack of any attempt to remedy the deterioration, constitute a violation of Section 451,” which requires that service be “adequate, efficient, just and reasonable.” The CPUC required AT&T to meet a standard of 29.3 hours for initial OOS repairs and 39.4 hours for repeat OOS repairs (same line OOS within 30 days of initial repair), and imposed penalties for noncompliance. AT&T’s performance under this penalty mechanism was as follows:

- 2003 – met initial and repeat OOS standards.
- 2004 – met initial and repeat OOS standards.
- 2005 – failed to meet initial OOS standard for three months and fined \$900,000.
- 2006 – failed to meet initial OOS standard for three months and fined \$900,000.
- 2007 – failed to meet initial and repeat OOS standard for one month.
- 2008 – failed to meet initial OOS standard for three months and repeat OOS standard for two months.
- 2009 – failed to meet initial OOS and repeat OOS standard for two months. (reports required for only first six months of 2009).

In a resolution imposing the penalties for 2006, the CPUC emphasized the threat to public safety from prolonged outages and committed to diligent monitoring of the issue:

“[W]e note that hundreds of AT&T’s residential customers’ outage services were not restored for 240 hours (10 days) even after exclusions. Public safety issues arise when customers’ phones are out of service for extended periods of time, because access to emergency services may be jeopardized. We will continue to monitor AT&T’s outage repair efforts and direct AT&T to provide corrective measures if similar problems persist in the future.”

CPUC Eliminates Penalty Mechanism for Inadequate OOS Repair Time

The CPUC discontinued the AT&T OOS penalty mechanism in July 2009 when it adopted GO 133-C and the OOS standard of 90 percent in 24 hours. Rather than impose any automatic penalties for noncompliance with GO 133-C, the CPUC authorized the staff to require carriers to present proposals on improving performance, require monthly reporting, and recommend that the CPUC institute a formal investigation for alleged failure to meet a standard for six or more consecutive months. No investigation has been instituted to date, although the CPUC staff reports that they have been in ongoing discussions with AT&T regarding whether the manner in which AT&T reports the data and calculates exclusions complies with GO 133-C.

On August 16, 2010, after failing to meet the GO 133-C standard for OOS in each preceding month of the year, AT&T filed a plan for corrective action stating that “[w]e have just become aware of the problems in meeting the OOS requirement.” AT&T stated that it was initiating the following activities to achieve progress toward meeting the OOS standard:

- Beginning in August, overtime hours have been increased.
- Personnel from other workgroups have been borrowed and assigned to maintenance field work.
- In order to make the most of available personnel, discretionary administrative tasks, training, and routine maintenance will be deferred where appropriate.

AT&T’s third quarter GO 133-C report showed substantial increases in the percent of OOS reports cleared in 24 hours for both August (54%) and September (75.56%), although CPUC staff claims these numbers overstate performance by incorrectly calculating exclusions.

Ensuring Service Quality in a Competitive Market

The CPUC's July 2009 decision relied on a competitive marketplace as justification for eliminating AT&T's OOS penalty mechanism and reducing the number of service quality measures. The CPUC found that competition applies a natural pressure for carriers to provide high quality service, but that some service quality reporting was nonetheless warranted because of the CPUC's statutory duty to ensure adequate service quality. Rather than a penalty mechanism, the CPUC focused on customer education and required that carriers' service quality reports be posted on the CPUC web site. This will allow consumers to use the data to decide whether a carrier's level of service meets their needs and make an informed choice among service providers.

To date, however, a year and a half after the decision, and more than a year after the first monthly data was gathered, no service quality data has been posted on the CPUC web site. The CPUC cites the ongoing dispute about calculation of exclusions from OOS repair time as the primary reason why no data has been posted. Resolution of the matter has not been elevated for commission action.

However, even if the data were posted, there is a significant question as to whether service quality data about only landline service providers gives customers sufficient information about the choices available for telephone service. Except in certain markets, customers rarely are choosing between AT&T or Verizon or other incumbent carriers. Rather, the choice customers face is between one of those landline carriers and a wireless provider or a cable company or another provider of voice service using Internet-based technology. Information about all these providers would enable customers to make an informed choice on a provider.

For the text of the CPUC's General Order 133-C and the 2009 decision adopting it, see:

<http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/Service+Quality.htm>

For the text of the 2001 CPUC decision imposing an OOS penalty mechanism on AT&T, see:

http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/11807.PDF

For the text of the 2007 CPUC Resolution T-17120 imposing OOS penalties on AT&T, see:

http://docs.cpuc.ca.gov/published/Final_resolution/74868.htm