Executive Summary

Late in 2013, the FCC released a Report and Order addressing issues regarding the improvement of 911 reliability. The R&O is partially in response to a series of widespread outages that took place in June 2012 during a derecho storm in the Midwest and Mid-Atlantic areas of the United States. The new rules require all covered 911 service providers (basically those wireline providers that provide service directly to PSAPs) to provide an annual certification to the FCC stating that the carrier has implemented industry-backed best practices or acceptable alternative measures to ensure 911 service reliability. Also adopted is a new requirement regarding the notification of PSAPs during an outage.

Covered 911 Service Providers include any entity that provides 911, E911, or NG911 capabilities such as call routing, ALI, ANI directly to a PSAP, statewide default answering point, or appropriate local emergency authority. Covered providers can also include those that operate one or more central offices that directly serve a PSAP.

The best practices, in large part identified by the Communications Security, Reliability, and Interoperability Council (CSRIC), cover three vital areas:

1. Circuit Diversity Audits
2. Central Office Backup Power
3. Network Monitoring

The first full certification will be due two years after the effective date of the new rules. However, an interim certification will be due one year after the new rules take effect that reports on the progress of implementing 911 reliability measures.

Changes to PSAP outage notification include a new requirement to notify PSAPs within 30 minutes of a possible service-affecting outage, and a follow-up no later that two hours after the initial notification that is to contain additional information (such as scope of the outage and estimated resolution time).

Certain of the FCC’s new 911 reliability rules took effect on February 18, 2014, namely the obligation for all covered 911 providers to take reasonable measures to provide reliable 911 service with respect to circuit diversity, central office backup power, and diverse network monitoring. All other rules adopted require OMB approval, which has yet to be received, before becoming effective.

Certification Requirements

As stated above, the certification requirements adopted in the R&O will not be fully implemented until 2 years after the rules become effective, which has yet to happen. More detail on these certification requirements follows.

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1. Circuit Diversity Audits

The FCC requires all covered 911 service providers to perform annual circuit diversity audits of critical 911 circuits, to be monitored and enforced through the annual certifications. Covered providers are also to:

- Tag such Critical 911 Circuits to reduce the probability of inadvertent loss of diversity in the period between audits; and
- Eliminate all single points of failure in Critical 911 Circuits or equivalent data paths serving each PSAP.

*An important feature of the FCC’s 911 reliability rules is the possibility for covered providers to adopt “alternative measures” instead of those specifically listed in the rules. While this presents some amount of flexibility, the FCC made it clear that reporting such alternative measures could trigger further (i.e., increased) review of the annual certification filing.

2. Backup Power

Covered providers are to certify that, for central offices that service a PSAP, backup power that provides 24 hours of service at full office load (72 hours for COs that host selective routers). A covered provider is also to certify for these same COs whether it:

- Tests and maintains all backup power equipment in such central offices in accordance with the manufacturer’s specifications;
- Designs backup generators in such central offices for fully automatic operation and for ease of manual operation, when required; and
- Designs, installs, and maintains each generator in any central office that is served by more than one backup generator as a stand-alone unit that does not depend on the operation of another generator for proper functioning.

*Alternative measures are also available for backup power requirements.

3. Network Monitoring

A covered provider is to certify whether it has, within the past year:

- Conducted Diversity Audits of the Aggregation Points that it uses to gather network monitoring data in each 911 Service Area;
- Conducted Diversity Audits of Monitoring Links between Aggregation Points and NOCs for each 911 Service Area in which it operates; and
- Implemented Physically Diverse Aggregation Points for network monitoring data in each 911 Service Area and Physically Diverse Monitoring Links from such aggregation points to at least one NOC.

*Alternative measures are also available for network monitoring requirements, which may be especially relevant to RLECs.

Conclusion

Even though the certification requirements are not yet effective, any covered 911 service providers should begin looking at the new rules and determine the best way to comply and eventually certify as to circuit auditing, backup power, and network monitoring. Also, be aware of the new PSAP outage notification rules, and that as of February 18, 2014, all covered providers are obligated to provide reliable 911 service within the framework of the FCC’s new rules.

If you have any questions, please let us know.