

and has now proposed new rules that will help prevent similar outages in the future. The following comments will address certain aspects of the *NPRM* that relate directly to PSAPs.

The Commission has previously relied primarily on voluntary best practices, including those adopted by the Communications, Security, Reliability and Interoperability Council (CSRIC), to ensure that telecommunications service providers implement appropriate procedures to prevent outages that could disrupt 9-1-1 calls. Unfortunately, that approach has proven inadequate, as demonstrated by the repeated failures by service providers to follow established best practices in the immediate aftermath of last year's derecho storm. Therefore, APCO agrees that the Commission needs to take action in the areas addressed in the *NPRM*.

APCO also agrees with the proposed regulatory definition of the term "9-1-1 service provider" as a communications provider "responsible for routing and delivering 9-1-1 calls to PSAPs." It is important to note, however, that current standards and certification requirements also include data centers and, in the future, will include other facilities that will house NG9-1-1 components. Such entities should also be subject to best practices and the Commission's rules, at least to the extent permitted by relevant law.

Possible approaches

The Commission seeks comments on several general regulatory approaches for addressing the 9-1-1 outage problem. One such approach is to require periodic reporting by service providers, which APCO supports as a partial solution. Equally important, the Commission will need to review carefully those reports in a timely manner and seek further information and clarification when the reports are incomplete or reflect deficiencies.

However, the Commission should go a step further than reporting rules and also adopt reliability requirements. For example, APCO agrees with the suggestion in the *NPRM* that the

Commission require compliance with CSRIC Best Practice 8-7-0532, concerning specified levels of physical diversity for 9-1-1 circuits, and CSRIC 8-7-5281, regarding interdependent backup generators. Reliance on CSRIC or other best practices as regulatory requirements will necessitate ongoing review and updating to ensure that the requirements remain relevant. APCO encourages this approach to be adopted.

APCO also supports the use of periodic compliance reviews and site inspections of service provider facilities to verify adherence to certain standards. The timing of such reviews or inspections should be governed by the criticality of the service. While APCO acknowledges that there will be recurring expenses with this approach, we stress the need to have the critical components of the 9-1-1 delivery system functioning at peak performance expectations 24x7.

PSAP Notification

A critical part of the Commission's *NPRM* addresses service provider notification to PSAPs when system outages occur. Without prompt and accurate notice, PSAPs are left totally unaware that emergency calls for assistance are not being delivered. Without timely notification, the PSAPs have no knowledge about the cause of apparent problems, the time to fix (TOF) or the geographic coverage area. The Commission proposes that notifications be provided "immediately." That is obviously desirable, though the term "immediately" could be open to disputed interpretation. APCO suggests that notification be provided "immediately, within no more than 15 minutes of the service provider becoming aware of the outage."

The types of outages that must be reported should include any outage that would be central to a PSAP's operations. This would include outages to: (a) a PSAP's 9-1-1 or 10-digit numbers; (b) customers with a Numbering Plan Area Code (NPA) / Central Office (exchange) code (NXX) within the PSAP's jurisdiction, both wireless and wireline, as this impedes the

PSAP's ability to receive calls from the public and potentially delays, or even prevents, response to emergencies; and (c) Signaling System No. 7 (SS7) where used for transport of wireless traffic and SMS.

The method of notification should include electronic communication and positive, verified, human contact with an on-duty PSAP supervisor. This procedure could avoid some of the problems that occurred following the derecho when electronic messages were sent, but never received. Carriers already have PSAP contact numbers and most PSAP's have both wireline and wireless contact numbers listed. However, there may be situations in which outages occur with both wireline and wireless services, in which case e-mail contact may be the best alternative, though it too could be disrupted depending upon the relevant Internet connections. The final option, where others fail, may be to contact previously identified regional PSAP partners who may have private land mobile radio communication connections to the relevant PSAP. The CJIS/NLETS system might also be considered, as it is independent of either the 9-1-1 or 10-digit lines in the PSAP. In any event, service providers must be required to retain records of their communications with PSAPS to demonstrate compliance.

The Commission's notification requirements will need to be broader than the current rules. The advent of NG9-1-1 will bring additional players into the flow of data from 9-1-1 callers to PSAPs. To the extent permitted by the Commission's jurisdiction, this should include any entity that provides interface to 9-1-1 or public safety communications systems.

For NPA/NXX outages, call centers, data centers, and consolidated centers should report outages if they provide service to a disrupted NPA/NXX, regardless of the physical location of the center. The option exists to define a notification area by geo-coding (Lat-Long). This would basically be a reverse 9-1-1 system for carriers whereby they could notify the appropriate call

center based on a “geo fence” around the appropriate reporting area coupled with reporting/service provider contact information. While the technology already exists, it would require modification to handle scope and specifics of carrier notification to PSAP’s versus PSAP notification to citizens. This effort is not daunting and we believe would not impose undue hardship on the responsible parties. Further, consolidated centers must include in the reporting requirement for any citizens within their jurisdiction.

CONCLUSION

Therefore, for the reasons set forth above and in the *NPRM*, the Commission should adopt the proposed rules to prevent dangerous disruptions to PSAP operations.

Respectfully submitted,

/s/

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