

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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| In the Matter of |) | |
| |) | |
| Ensuring Customer Premises Equipment Backup Power for Continuity of Communications |) | PS Docket No. 14-174 |
| |) | |
| Technology Transitions |) | GN Docket No. 13-5 |
| |) | |
| Policies and Rules Governing Retirement Of Copper Loops by Incumbent Local Exchange Carriers |) | RM-11358 |
| |) | |
| Special Access for Price Cap Local Exchange Carriers |) | WC Docket No. 05-25 |
| |) | |
| AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services |) | RM-10593 |

COMMENTS OF APCO

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”) hereby submits the following comments in response to the Commission’s *Notice of Proposed Rulemaking and Declaratory Ruling*, FCC 14-185, released November 25, 2014 (“*NPRM*”), in the above-captioned proceedings.

Founded in 1935, APCO is the nation’s oldest and largest public safety communications organization. Most of APCO’s over 20,000 members are state or local government employees who manage and operate communications systems -- including Public Safety Answering Points (PSAPs), dispatch centers, radio networks, and information technology -- for law enforcement, fire, emergency medical, forestry conservation, highway maintenance, disaster relief, and other public safety agencies. APCO has long been involved in FCC proceedings regarding 9-1-1

capability and other aspects of public safety communications.

The Commission is seeking comments on critical issues arising as a result of telecommunications providers moving away from traditional copper line networks. Copper networks include independent line power, which allows basic telephone services to operate even during localized or wide-spread power outages. Copper replacements, such as fiber optic lines, do not have integrated power sources, thus requiring consumer premises equipment (“CPE”) to have independent power sources to operate. If that independent power source is the local electric grid, CPE will fail during power outages absent back-up (battery or generator) power. Of particular concern to APCO, such power outages would limit the ability of the public to call 9-1-1 during an emergency. This could be as narrowly focused as a house fire that destroys a home’s power line, or as wide spread as a blizzard, hurricane or other disaster that causes major power outages across an entire region. In either case, it is critical that the public retain the ability to call 9-1-1 for emergency assistance. Therefore, APCO is pleased that the Commission is exploring potential rules that would address the very real harm that could arise as result of increasing dependence on back-up power for CPE.

APCO also supports provisions to ensure that the public (including PSAPs themselves) receives timely, accurate, and informative notices of any conversions from copper lines to alternatives that may not offer the same capabilities. The Commission’s Section 214 approval process should also take into consideration the impact of service discontinuation (including copper retirement) on 9-1-1 service.

Back-up Power

The Commission is considering rules that would require some form of back-up power for

CPE to provide sufficient power for “minimally essential communication,” including 9-1-1.¹ APCO supports that approach. In addition, the transition to non-copper, IP-based networks, is taking place concurrent with the transition to Next Generation 9-1-1 (NG9-1-1), which, in addition to voice, will provide consumers the ability to use multi-media capabilities (*e.g.*, text, data, and video) to contact and provide information to PSAPs during emergencies. Ideally, all NG9-1-1 capabilities should be considered “minimally essential.” However, at least initially, multi-media capabilities could become a drain on limited back-up power capabilities for CPE, especially over extended time periods. Should that be the case, at least voice calls and texts to 9-1-1 should be considered “minimally essential communications,” with the eventual goal of including all NG9-1-1 capabilities.

Public Education and Notification

To the extent that consumers will need to self-provision CPE backup (*e.g.*, providing and/or maintaining batteries), public education will be essential. In particular, public education must include information on any impact to 9-1-1 services should the consumer fail to self-provision CPE backup power or should they elect not to enable any carrier recommendations. APCO also agrees with CSRIC’s recommendation that “some level of standardization is needed of . . . power systems and interfaces, if VoIP services are to meet the reliability that consumers expect in the United States.”² Standardization could also help simplify the potentially complicated process of self-provision of CPE backup.

Copper retirement, while an inevitable step in the modernization of telecommunications networks, could have a further negative impact on consumers and other parties (including PSAPs), especially if they are not provided with adequate notice of impending network changes.

¹ *NPRM* at ¶34.

² *See NPRM* at ¶46.

Consumers need to be informed of any impact on 9-1-1 service as a result of copper retirement in their area, and PSAPs need to be informed and included in the public education effort. PSAPs will undoubtedly receive complaints, questions, and other inquiries from the public, and should be prepared for whatever changes in services might result. PSAPs will also need to implement planning and preparation for the transition at their own facilities.

Section 214 Authority and Replacement Technology

Pursuant to Section 214, telecommunications carriers are required to submit applications seeking authority to discontinue service, including copper retirement.³ In that context, carriers should be required to address the replacement technologies that will ensure that 9-1-1 service to the public will not be diminished in any way. The ability to provide ongoing 9-1-1 service must be first and foremost among the attributes in the Commission's evaluation of such technologies. In particular, copper replacements in the foreseeable future must accommodate all existing PSAPs in the relevant service area, including those that have yet to transition to NG9-1-1 (IP based) systems. That transition will not be immediate and continuity of operations with existing 9-1-1 systems, and within existing network architectures, is vital for public safety. Many PSAPs will require substantial financial resources to convert to IP-based systems.

The Commission also seeks comments regarding what "call functionality" must be retained by replacement technologies for copper. APCO recommends that alarm systems and medical alert monitors need to be included in such functionality requirements. Alarms and alerts are a critical part of the input into PSAPs and the provision of public safety response, whether it is through automated alarm protocols such as the APCO/CSAA Automated Secure Alarm

³ 47 U.S.C. § 214.

Protocol (“ASAP”),⁴ or traditional analog or digital interfaces. Evaluation of this functionality is a must, and any identified shortfalls or anomalies should be identified to ensure that any impact to the public or public safety is known well ahead of time.

Cybersecurity

Cybersecurity is another concern for both PSAPs and consumers. The ability of outside actors to infiltrate IP networks is well proven, whether through intrusion, disruption, misdirection or forms of distributed attack. As PSAPs become more interconnected with IP networks, they too are at risk. Thus, as suggested in the *NPRM*, the Commission should “require demonstration, as part of the section 214 discontinuance process, that any IP-supported networks or network components offer comparable communications security, integrity, and reliability.”⁵ A study of the impact of network changes, and tests/demonstration of security capabilities should be conducted. There are a number of factors to consider, including but not limited to (a) how the providers’ systems will handle user credentialing, access control, authentication, auditing, confidentiality, data integrity, physical security, and applications; (b) identified high-level network requirements, network services, device management and identity management services; and (c) whether services are provided by a central authority and delivered through centralized or distributed service mechanisms, or through CPE-based systems, and how security is addressed for each solution.

Automatic Location Information

A critical element of 9-1-1 systems is Automatic Location Information (ALI) provided with each call so that PSAPs can quickly and accurately ascertain the exact location of the

⁴ <https://www.apcointl.org/doc/911-resources/automated-secure-alarm-protocol/127-automated-secure-alarm-protocol/file.html>

⁵ *NPRM* at ¶99.

emergency and dispatch the appropriate first responders without delay. In most cases, calls originating from CPE connected to wireline networks provide ALI that include the exact civic address (street address, apartment or office number, *etc.*) associated with the fixed wireline device. Any replacement of current wireline service must provide the same or better levels of ALI regarding civic addresses. Carriers should be allowed discretion in how they approach and provide this civic address equivalent, but they should not be allowed to deliver products with dissimilar results to the PSAPs. Nor should network changes lead to additional costs for PSAPs to receive the required civic address information.

CONCLUSION

Therefore, for the reasons set forth above, APCO urges the Commission to proceed to adopt rules to ensure continuity of 9-1-1 services during and following telecommunications transitions.

Respectfully submitted,

/s/

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