

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

In the Matter of:	)	
	)	
911 Governance and Accountability;	)	PS Docket No. 14-193
	)	
Improving 911 Reliability	)	PS Docket No. 13-75
	)	

**REPLY COMMENTS OF THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

The Pennsylvania Public Utility Commission (Pa PUC) respectfully submits these Reply Comments responding to the November 21, 2014 Federal Communications Commission (Commission) Notice of Proposed Rulemaking (2014 NOPR) that seeks comment on core principles that have guided and will continue to guide the Commission’s approach to ensuring not only reliable and resilient 911 service but also its continuing collaboration with states and local authorities on matters involving 911 service performance.<sup>1</sup> The Commission’s proposed uniform national approach to Internet Protocol (IP)-based 911 services aims to reduce vulnerabilities and to ensure the quality of 911 services as new communications platforms and technologies are introduced.<sup>2</sup> Comments were due on or before March 23, 2015, and Reply Comments are due on or before April 21, 2015.

The Pa PUC appreciates the opportunity to file Reply Comments. As an initial matter, these Reply Comments should not be construed as binding on the Pa PUC in any matter pending before the Pa PUC. Moreover, the Pa PUC’s position set forth in these

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<sup>1</sup> *Policy Statement and Notice of Proposed Rulemaking*, In the Matter of 911 Governance Accountability, Improving 911 Reliability; PS Docket No. 14-193, PS Docket No. 13-75; rel. Nov. 21, 2014 (2014 NOPR), ¶ 4. The initial comment and reply comment deadlines were modified via a Commission Order released on March 6, 2015.

<sup>2</sup> 2014 NOPR, ¶ 3.

Reply Comments could change in response to later events, including ex parte filings, the review of other filed Initial and Reply Comments, and legal proceedings or other regulatory developments at the State or federal level.

### **Introduction and Summary**

The transition to Internet Protocol (IP)-based access, originating, and transport 911 services has led to an array of 911 system architectures existing alongside the more traditional time division multiplexing (TDM) network architecture. This evolving landscape and diffusion of responsibility means that there are multi-state aspects of these 911 services that may increase vulnerabilities and cause confusion to public safety answering points (PSAPs). Therefore, in conjunction with State regulators and local partners, the Commission seeks to promote and implement a national governance structure that proactively increases end-to-end accountability and adequately addresses regional and nationwide IP-based 911 networks that cross state boundaries and serve PSAPs in multiple states by providing both physical connectivity and/or other 911-related functionalities (e.g., data bases, software-based network management and control, etc.).

The Pa PUC largely supports the need for action regarding 911 service and the proposals offered by the Commission in its 2014 NOPR. However, the Pa PUC emphasizes the ongoing critical role that States and localities play in regulating 911 service. The rulemaking efforts of the Commission should not supplant State action and the States and local officials should be consulted as national policies are developed. Additionally, as discussed below, information collected by the Commission or by 911 Network Operations Center (NOC) providers during 911 outages or other disruptions should be jointly filed with or made simultaneously accessible to State commissions and agencies. This will be helpful in planning for future outages and in enforcing state laws.

## **FCC Rule 12.4**

In response to investigating widespread and prolonged 911 outages following the 2012 derecho storm, the Commission adopted Rule 12.4<sup>3</sup> to address deficiencies and ensure improved reliability in the future.<sup>4</sup> The rule contains the following two components: (1) a substantive requirement that “covered 911 service providers shall take reasonable measures to provide reliable 911 service with respect to circuit diversity, central-office backup power, and diverse network monitoring;” and (2) a reporting requirement that such providers certify annually whether they have implemented specified best practices or reasonable alternative measures in each of those substantive areas.<sup>5</sup> Rule 12.4 applies to “covered 911 service providers,” defined generally as those that provide core 911 capabilities (typically pursuant to a contractual agreement) “directly to a public safety answering point (PSAP).”<sup>6</sup> Additional Commission rules require certain originating service providers to “transmit all 911 calls to a PSAP” and to notify PSAPs of disruptions in 911 service.<sup>7</sup> The Commission states that these rules reflect that all service providers in the chain of 911 service – from origination to completion – must be accountable for reliable service and must be responsive when outages occur.<sup>8</sup>

Recent multi-state 911 outages that, unlike those during the 2012 derecho storm, were not caused by outside factors like inclement weather, physical damage to network infrastructure, or a loss of commercial power, but instead occurred under routine-use

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<sup>3</sup> 47 C.F.R. § 12.4; *See* In the Matter of Reliability and Continuity of Communications Networks, Including Broadband Technologies, PS Docket Nos. 13-75, 11-60, *Report and Order*, 28 FCC 17476, 17487 (2013) (911 Reliability Order)

<sup>4</sup> 2014 NOPR, ¶ 39.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at ¶¶ 19, 39.

<sup>7</sup> *Id.* at ¶ 19.

<sup>8</sup> *Id.*

conditions, have caused the Commission to reevaluate the scope of entities covered by Rule 12.4.<sup>9</sup> The Commission first proposes to expand the definition of “covered 911 service provider” to include all entities that provide 911, Enhanced 911 (E911), or Next Generation 911 (NG911) capabilities irrespective of whether they are provided under a direct contractual relationship with a PSAP or through an emergency authority.<sup>10</sup> The proposed change addresses 911 network architectures where multiple service providers or sub-contractors provide call routing and automatic location information/automatic number identification capabilities; however, the proposed change does not mitigate the obligations of 911 service providers already subject to Rule 12.4.

The Pa PUC supports the Commission’s proposal to expand the scope of entities covered by Rule 12.4.<sup>11</sup> In our Comments filed in response to the Commission’s Notice of April 15, 2013 (April Notice), the Pa PUC recommended that the Commission define “covered 911 service providers” using the legal definitions for “telecommunications” or “information service” and classify all entities or networks directly or indirectly involved with 911 calls to a PSAP as telecommunications. The Pa PUC advocated this position because limiting “covered 911 service providers” to “services directly to a PSAP” risks excluding indirect providers or networks involved with 911/E911 access services and call traffic. The broader definition being proposed by the Commission now more effectively brings data centers and new forms for providing 911/E911 access within the

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<sup>9</sup> *Id.* at ¶ 41

<sup>10</sup> *Id.* at ¶ 42

<sup>11</sup> 2014 NOPR, Appendix A, Modifications to Rule 12.4(a)(4) Defining a Covered 911 Service Provider.

Commission's and the States' joint regulatory purview to ensure greater reliability and resiliency.<sup>12</sup>

The Commission also seeks comment on the existing duties of the agents and sub-contractors of "covered 911 service providers" and on the feasibility of extending certification requirements to such entities.<sup>13</sup> The Pa PUC supports expanded certification to all entities involved in critical aspects of safe and reliable 911 service as network architectures continue evolving. As the Washington Utilities and Transportation Commission succinctly states in its Comments, "[D]elivery of 911 services has evolved as niche entities have increasingly been engaged by traditional 911 service providers to assume a variety of network and service delivery functionalities....Many of the emerging 911 specialized providers merely serve as contractors or sub-agents to other traditional 911 service providers with overall contractual responsibility to public safety entities.... Expanding registration and certification requirements to such entities is a reasonable consequence of their emerging role that ensures each entity involved with 911 service

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<sup>12</sup> Comments of the Pennsylvania Public Utility Commission (May 13, 2013), PS Docket Nos. 13-75, 11-60, at 9 ("This broader definition also preserves cooperative federalism with several ancillary benefits. First, it is more consistent with the dual-sovereignty set out in Section 152(b), 47 U.S.C. § 152(b). Second, it expressly preserves independent state law and raises fewer concerns on allegations of constructive federal preemption. Third, this allows states with more stringent mandates to continue enforcing those mandates in addition to those of the [Commission]. Finally, this provides the [Commission] with access to state agencies and personnel experienced and capable of addressing 911 compliance issues, a useful resource that the [Commission] will need if they want to ensure compliance with those minimum federal mandates for 911." *See also* Comments of the California Public Utilities Commission (March 23, 2015), PS Docket Nos. 14-193 & 13-75 at 5-6. ("It is critical that new 911 system providers that process 911 calls originating from multiple states, or multiple areas of a state, be capable of continuing to provide service in the event that part of its system is disabled. The more centralized the system, the greater the need for redundancy.")

<sup>13</sup> 2014 NOPR, at ¶ 42.

delivery affirmatively certifies compliance with federal requirements.”<sup>14</sup> The Pa PUC agrees with this position considering the inherent importance of reliable 911 service.

Currently, the Commission requires certification and reasonable measures to provide reliable service only with respect to circuit diversity, central office backup power, and diverse network monitoring, pursuant to Rule 12.4.<sup>15</sup> In our previous Comments to the April Notice, the Pa PUC: (1) supported auditing for physical diversity to avoid single points for routine 911 circuits; (2) opined that backup power should be required for any central office, network node facility, or equipment needed for 911; and (3) supported diversity in network monitoring capabilities compliance.<sup>16</sup> In its 2014 NOPR, the Commission acknowledges that the current rules may overlook relevant factors in the reliability of existing 911 networks and proposes to expand network reliability practices and corresponding elements of annual certification.<sup>17</sup> The Pa PUC supports this approach to the extent that it does not vitiate state law or centralize regulatory authority. The Pa PUC agrees that the reliability and testing of software and databases used to process 911 calls will be critical and advocates that certification should address factors like resiliency, cybersecurity and supply chain risk management.<sup>18</sup>

All entities under the proposed definition of “covered 911 service providers” should be required to certify that they will take reasonable measures to share information and situational awareness during outages and disruptions in 911 service. The Pa PUC believes that indicating whether a “covered 911 service provider” has best practices in place to notify PSAPs of an outage within specified timeframes is an appropriate federal

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<sup>14</sup> Comments of the Washington Utilities and Transportation Commission (March 17, 2015), PS Docket Nos. 14-193 & 13-75, at 7.

<sup>15</sup> 2014 NOPR, at ¶¶ 19, 43.

<sup>16</sup> Comments of the Pennsylvania Public Utility Commission (May 13, 2013), pp. 13-16.

<sup>17</sup> 2014 NOPR, ¶¶ 43-44.

<sup>18</sup> See 2014 NOPR, ¶ 45.

minimum.<sup>19</sup> This would allow the States to require more proactive measures to accommodate their unique needs under independent State law. The Pa PUC supports the Commission's desire to further investigate and to incorporate reasonable measures and annual certification requirements and its recommendation to have its Communications Security, Reliability, and Interoperability Council (CSRIC) develop these.

### **States' Jurisdiction in 911 Governance**

Throughout its 2014 NOPR, the Commission asserts that State regulators and local emergency response agencies are critical in ensuring that 911 is available when needed and that every 911 call will be answered.<sup>20</sup> The Commission acknowledges that the governance of legacy 911 is shared between the State, local, and federal levels and states that the purpose of its rulemaking is not to supplant state action.<sup>21</sup> Instead, the Commission contends that its goal is to “encourage and support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and to consult and cooperate with State and local officials when developing national policies with respect to 911 governance, implementation, and reliability.”<sup>22</sup> The Pa PUC agrees that the Commission must not usurp State and local governance. Many decisions regarding 911 deployment, operations, and cost recovery are best made at the State and local level; continued oversight by States and localities is vital.

By the same token, the Pa PUC understands the evolving landscape of 911 service with the entry of new technologies and new 911 network providers. Networks and relevant systems that provide 911/E911/NG911 access and functionalities for end-user consumers are increasingly interlinked across state boundaries. This requires the

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<sup>19</sup> See 2014 NOPR, ¶ 46.

<sup>20</sup> 2014 NOPR, ¶ 2.

<sup>21</sup> *Id.* at ¶¶ 28, 58.

<sup>22</sup> *Id.* at ¶ 38.

development of some national standards. Commission action should not be stymied where reliance on voluntary efforts alone proves inadequate to ensure reliable and resilient 911 service. The Pa PUC believes that the Commission has correctly declined to impose reliability certification requirements on governmental authorities that provide their own 911 capabilities. The Pa PUC has been among the contingent that believes that the Commission should not interfere with internal operations of PSAPs as this runs counter to cooperative federalism.<sup>23</sup> State and local authorities should retain their primary role in the management and development of NG911 by PSAPs including PSAP architecture.

In Pennsylvania, 911 issues are addressed by the Pa PUC and the Pennsylvania Emergency Management Agency (PEMA). The Pa PUC is authorized to set wireline 911 rates to support the administration and operations of 911 PSAPs. The Pa PUC also has authority to address the administration and provision of 911 for IP-enabled services under the VoIP Freedom Act, 73 Pa. C.S. §§ 2251.1 *et seq.* Additionally, the Pa PUC exercises regulatory oversight over certain categories of providers of retail and wholesale 911/E911 access services.

PEMA oversees PSAP operations in Pennsylvania's county-based PSAPs, as well as Cities of Allentown and Bethlehem, using support from a surcharge imposed on wireless and VoIP. Those surcharge revenues are provided to PEMA for allocation to PSAPs as set out at 35 Pa. C.S. §§ 5301 *et seq.* 911 issues that have arisen have been addressed informally at the PUC, and this process has worked adequately in Pennsylvania. Therefore, Pennsylvania's voluntary, proactive efforts continue to be effective and sufficient.<sup>24</sup>

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<sup>23</sup> *Id.* at ¶ 28.

<sup>24</sup> H.B. 911, Gen. Assem., Sess. of 2015 (Pa.).

The Pa PUC does support the development of a federal regulatory “backstop” to eliminate gaps between federal and State authority. Where multi-state aspects of interlinked 911 network architectures exist, or where technology trends make vulnerabilities more likely or cause confusion to PSAPs and end-users, the Commission is best positioned to forge resolutions and develop national standards. Also, in instances where a number of States have elected not to exercise jurisdiction over IP-based communications services, a federal-level process is needed to ensure that regulatory gaps in oversight do not exist for reliable and redundant access to 911/E911/NG911 services.<sup>25</sup> In complementing existing State oversight, however, the Commission should honor the efforts of States that have exhibited the capability to provide reliable 911 access services under applicable and independent State laws.

“Covered 911 service providers” that seek to offer new services that affect 911 call completion should be required to certify to the State, or to both the State and the Commission, that they have the technical and operational capabilities of providing reliable 911 service. The Pa PUC agrees with the Commission that States should be allowed to opt in to the federal certification framework as the basis for State-level governance where State certification of 911 service providers is not in place. Also, the Pa PUC supports the Commission’s proposal to allow States to enforce federal certification requirements at the State level because State utility commissions and/or other responsible State agencies have the requisite experience and resources to handle such work. The Commission must grant this authority expressly to avoid challenges to States’ jurisdiction and associated costly litigation both before the Commission and/or courts of competent jurisdiction.

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<sup>25</sup> See also *In re Ensuring Customer Premises Equipment Backup Power for Continuity of Communications; Technology Transitions, et al.*, PS Docket No. 14-174, GN Docket No. 13-5, *et al.*, (FCC, Rel. Nov. 25, 2014), Notice of Proposed Rulemaking and Declaratory Ruling, FCC 14-185.

### **Situational Awareness and Coordination Responsibilities During 911 Outages**

Noting the need for better coordination and information-sharing among communications providers and any subcontractors or vendors that provide components of 911 service during large-scale outages, the Commission proposes clarifying responsibility for situational awareness and coordination among such providers. To accomplish this, the Commission proposes establishing a class of “covered 911 service providers” – 911 Network Operations Center (NOC) providers – that would perform a triage function to mitigate the duration and impact of outages (e.g., monitoring their networks to detect disruptions or degradations in 911 service, and affirmatively communicating relevant information to other stakeholders).<sup>26</sup> The Commission offers that the role of 911 NOC provider for each jurisdiction should be assigned to the entity responsible for transport of 911 traffic to the PSAP or PSAPs serving that jurisdiction; the Commission believes that this role would most often be assumed by the incumbent local exchange carriers (ILECs).<sup>27</sup>

The Pa PUC agrees with the Commission’s determination that better mechanisms need to be in place during outages to provide timely and comprehensive information to PSAPs and the public. The Pa PUC also supports the appointment of 911 NOC providers in each jurisdiction to serve as clearinghouses for situational awareness. However, the Pa PUC advocates that assigning 911 NOC providers in each jurisdiction should be in consultation with State regulatory commissions and other agencies, like PEMA in Pennsylvania, responsible for oversight. Information collected by 911 NOC providers during and after outages should be available and shared under the Commission’s proposed framework.

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<sup>26</sup> 2014 NOPR, at ¶¶ 64-66.

<sup>27</sup> *Id.* at ¶ 68

The Pa PUC believes that, to implement this framework meaningfully, the Commission may need to facilitate improved communication by maintaining a centralized database of contact information for PSAPs and State emergency offices. However, the Commission should expressly authorize State commissions to access the information stored at this hub for use in their oversight capacities. Indeed, where the New and Emerging Technologies 911 Improvement Act authorizes the Commission to gather and disseminate information from carriers and other regulated entities for the purpose of ensuring effective public safety communications,<sup>28</sup> the Commission should also expressly grant State commissions access to such critical information. Concerns over regulatory confidentiality should be addressed by the States, the Commission, and industry.<sup>29</sup>

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<sup>28</sup> *Id.* at 78.

<sup>29</sup> *See generally In re Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, PS Docket No. 15-80, ET Docket No. 04-35 (FCC, Rel. March 30, 2015), Notice of Proposed Rulemaking, Second Report and Order and Order on Reconsideration, FCC 15-39, ¶¶ 48-53 & n. 95 at 17-19 (sharing of FCC Network Outage Reporting System or NORS data with State Public Utility Commissions and associated California Public Utilities Commission Petition of November 12, 2009, at ET Docket No. 04-35).

## **Conclusion**

The Pa PUC supports the initiative taken by the Commission to improve on the reliability and resiliency of the communications infrastructure and coordination efforts with respect to 911 service in the wake of major outages and other disruptions. The Pa PUC supports expanding the scope of entities covered by Rule 12.4 because limiting “covered 911 service providers” to “services directly to a PSAP” risks excluding indirect providers or networks involved with 911/E911 access services and call traffic. The Pa PUC also supports expanding certification requirements to all entities involved in critical aspects of safe and reliable 911 service and enhancing the range of network reliability practices to capture a greater number of relevant factors.

The Pa PUC agrees with the Commission’s assessment that its rulemaking should not usurp the jurisdiction and role of States in localities in the governance of 911 service. Rather, the Commission should encourage and support efforts by the States to deploy emergency communications infrastructure. Additionally, the Commission should expressly state that information filed with the Commission regarding 911 outages should be made readily available to State agencies.

Finally, the Pa PUC supports the appointment of 911 NOC providers in each jurisdiction to serve as clearinghouses for situational awareness and for coordinated efforts during 911 outages. The Pa PUC believes that better mechanisms need to be instituted during outages to provide timely and comprehensive information to PSAPs and the public regarding emergency services.

The Pa PUC thanks the Commission for providing an opportunity to file reply comments.

**THE COMMONWEALTH OF PENNSYLVANIA  
PUBLIC UTILITY COMMISSION**

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