

State of California

Public Utilities Commission
San Francisco

MEMORANDUM

Date : June 2, 2015

To : The Commission
(Meeting of June 11, 2015)

From : Hien Vo Winter
Public Utilities Counsel III

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Subject: FCC's Request for Comments on Proposed Updates to its Part 4
Outage Reporting Rules, Including the CPUC's Petition for Direct
Access to the FCC's Network Outage Reporting System (NORS)

RECOMMENDATION: The CPUC should file comments in response to the Federal Communications Commission's (FCC) *Notice of Proposed Rulemaking, Second Report and Order and Order on Reconsideration (NPRM)*,¹ released on March 30, 2015, regarding specific proposals to improve the FCC's *Part 4 rules*, which govern the FCC's collection and use of outage data. Adopted in 2004 and effective January 3, 2005, the *Part 4 rules* require certain providers of communications to electronically file reports of network outages that exceed specified thresholds of magnitude and duration.² These outage reports are filed and maintained in the FCC's Network Outage Reporting System (NORS).

The *NPRM* includes proposals to (1) clarify certain rules concerning call failures that impact access to 9-1-1 and PSAPs,³ (2) modify thresholds related to major transport

¹ The *Second Report and Order and Order on Reconsideration* accompanying this *NPRM* resolve issues that do not require comment. In the *Second Report and Order* the FCC declines to adopt a 2004 proposal to expand upon the outage reporting requirements adopted for airports. See *NPRM*, ¶ 56, at 20. In the *Order on Reconsideration* the FCC disposes of seven pending Petitions for Reconsideration filed in response to the *2004 Report and Order* that established the *Part 4 Rules* and NORS. See *FNPRM*, ¶¶ 57-72, at 20-25.

² See *NPRM*, ¶¶ 1 and 2, at 2, *citing* New Part 4 of the Commission's Rules Concerning Disruptions to Communications, ET Docket No. 04-35, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 16830 (2004).

³ See *NPRM*, ¶¶ 9-18, at 4-7.

facility outages,⁴ (3) adopt “a more standardized, technology neutral method for calculating the number of users ‘potentially affected’ by a wireless outage,⁵ (4) identify “special offices and facilities” (e.g., major military installations, key government facilities, nuclear power plants and relatively major airports) for Part 4 purposes,⁶ and (5) directly share the outage information in NORS with (a) states (in response to the CPUC’s 2009 Petition for Direct Access to NORS [“CPUC Petition”⁷]) and (b) other federal agencies.⁸ The fifth issue is the most significant to the CPUC.

Staff recommends supporting the FCC’s proposal to grant states direct password-protected read-only access to NORS for those communications providers⁹ operating in California, subject *only* to a state certifying that it has appropriate confidentiality protections in place, as proposed in the CPUC Petition (issue 5). The FCC should not impose any other conditions or restrictions, as suggested in the *NPRM*, in order for states to access NORS.

Staff also recommends providing limited comments on issues 1 and 3, mainly to emphasize that the FCC should not impose rules that would prohibit states from adopting their own rules as states deem necessary, which may include lower reporting thresholds than NORS, as well as other state-specific requirements. Staff recommends that the CPUC not comment on issues 2 and 4.

Comments and Replies are due 30 and 45 days, respectively, after publication in the Federal Register. The *NPRM* has not been published yet.

BACKGROUND: With this *NPRM*, the FCC seeks to “improve the quality and usefulness of the outage data the Commission receives”¹⁰ pursuant to the *Part 4 rules* and its associated Network Outage Reporting System.¹¹ Since the *Part 4 rules* and NORS were established in 2004, the FCC has “gained considerable experience administering

⁴ See *NPRM*, ¶¶ 19-30, at 7-11.

⁵ See *NPRM*, ¶¶ 31-37, at 11-14.

⁶ See *NPRM*, ¶¶ 38-47, at 14-17.

⁷ See Petition of the California Public Utilities Commission and The People of the State of California for Rulemaking on States’ Access to the Network Outage Reporting System (NORS) Database and a Ruling Granting California Access to NORS, ET Docket No. 04-35 (Nov. 12, 2009) (“CPUC Petition”).

⁸ See *NPRM*, ¶¶ 48-55, at 17-20.

⁹ Title 47 C.F.R. Part 4 § 4.3(b) defines a Communications provider as an entity that provides for a fee to one or more unaffiliated entities, by radio, wire, cable, satellite, and/or light guide: two-way voice and/or data communications, paging service, and/or SS7 communications.

¹⁰ See *NPRM*, ¶ 6, at 3.

¹¹ See *id.*, ¶ 1, at 2.

NORS, which has improved its ability to detect adverse outage trends and facilitate industry-wide network improvements.”¹² The FCC’s primary goal in refining its *Part 4 rules* “remains ensuring the reliability and resiliency of the Nation’s communications system, and in particular strengthening the Nation’s 911 system.”¹³

NORS is the web-based filing system through which communications providers covered by the FCC’s *Part 4 reporting rules* submit reports to the FCC.¹⁴ *Part 4 rules* require communications providers,¹⁵ generally defined as wireless, wireline, cable, and satellite communications providers of switched voice and paging communications services to electronically report information about significant disruptions or outages to their communications systems when specified disruption/outage thresholds, set forth in *Part 4*, are met. Communications providers must also report information regarding communications disruptions affecting the Enhanced 9-1-1 facilities and airports that meet the *Part 4* thresholds.

The FCC’s NORS reports and reporting requirements affect the CPUC. In 2009, in the context of reviewing and revising its service quality rules, the CPUC issued Decision (D.) 09-07-019. Decision 09-07-019 adopted General Order (G.O.) 133-C, which imposes the FCC’s NORS reporting requirements on certain carriers. Since D.09-07-019, the Commission has been requiring facilities-based and registered carriers to simultaneously provide the CPUC with NORS reports when they are filed with the FCC.¹⁶ While it was the CPUC’s preference when it adopted D.09-07-019 to obtain NORS data directly from the FCC, that option was not available, despite staff’s informal efforts.¹⁷ The Commission directed staff to “initiate steps to submit a formal request to the FCC requesting password-protected access to all California-specific NORS data.”¹⁸

On November 11, 2009, the CPUC formalized its request to the FCC by filing a Petition for Rulemaking. The Petition emphasized that the CPUC would treat the NORS data as confidential and that California has well-established confidentiality protections in place to prevent the public disclosure of NORS data.¹⁹ The Petition noted that the CPUC has password-protected access, similar to that proposed in the Petition, to the North American

¹² See *ibid.*

¹³ See *id.*, ¶ 6, at 3.

¹⁴ Part 4 of the FCC’s rules is found in Title 47 of the Code of Federal Regulations (47 C.F.R. Part 4).

¹⁵ 47 C.F.R. Part 4 § 4.3.

¹⁶ See D.09-07-019, *Slip. Op.*, at 5. D.09-07-019 adopted General Order (G.O.) 133-C (Service Quality Rules). The NORS reporting requirement is found in G.O. 133-C, Rule 4

¹⁷ See D.09-07-018, *Slip. Op.*, at 64.

¹⁸ *Ibid.*

¹⁹ See CPUC Petition, at 18-20; see also CPUC Reply Comments (Mar. 19, 2010) at 5-9.

Numbering Plan Administrator (“NANPA”) database. The NANPA database contains carrier number inventories reported by carriers in their Number Resources Utilization Forecast (“NRUF”) reports. The reports contain numbering data that both the service providers and the FCC deem confidential.²⁰

Pursuant to exemption 4 of the Freedom of Information Act (FOIA), the FCC need not disclose commercial or financial information that is privileged or confidential.²¹ The FCC had granted the CPUC password-protected access to the NANPA database because it provided evidence of state law, Public Utilities (P.U.) Code § 583 (implemented by G.O. 66-C), that protects confidential carrier information.²²

Consistent with the FCC’s treatment of NORS data, the CPUC ordered in D.09-07-019 that NORS data received directly from carriers would be kept confidential pursuant to § 583 and G.O. 66-C. Thus, regardless of whether the CPUC obtains NORS data directly from carriers or the FCC, NORS data would not be open to public inspection.

The CPUC also noted in D.09-07-019 that “[i]f in the future the Commission is granted access to the FCC’s NORS database, carriers may petition the Commission to modify our decision and GO 133-C to eliminate the requirement for separate California reporting of NORS data.”²³

On March 4, 2010, the FCC received comments from other states and carrier contingents, the majority of which acknowledged that outage and service disruption data is essential for state commissions to carry out their regulatory obligations. On March 19, 2010, the CPUC and other parties filed reply comments. The FCC has yet to act on the CPUC’s Petition. The FCC states it will hold the CPUC’s Petition in abeyance pending the completion of this rulemaking because it finds “notice-and-comment rulemaking is the appropriate vehicle for addressing this significant policy matter.”²⁴

Currently, in R.11-12-001, the CPUC is conducting a similar review of its service quality rules, as it had done in 2009. Pending before the CPUC in R.11-12-001 is a staff proposal to modify outage reporting requirements that may result in different or lower reporting thresholds than FCC thresholds.

²⁰ See CPUC Petition, at 15-17.

²¹ See *id.*, at 15-16.

²² See CPUC Petition, at 16-17.

²³ D.09-07-019, *Slip. Op.*, fn. 210, at 65.

²⁴ *NPRM*, ¶ 51, fn. 102, at 19.

DISCUSSION AND RECOMMENDATIONS: Staff recommends that the CPUC file comments in response to the *NPRM* on the following issues:

Part 4 Information Sharing (Issue 5, ¶¶ 48-55): CPUC Petition

The FCC proposes to grant states direct access to NORS, but access would be conditioned upon a state certifying that “it will keep the data confidential and that it has in place confidentiality protections at least equivalent to those set forth in the federal Freedom of Information Act (FOIA).”²⁵ Staff proposes that the Commission agree with this proposal because it is consistent with the CPUC’s Petition, explained above. However, this certification should be the *only* condition imposed upon states seeking direct access to NORS.

The FCC asks how it can “ensure that the data is shared with officials most in need of the information while maintaining confidentiality assurances that the information will be properly safeguarded.”²⁶ The *NPRM* lists several suggestions: security training, identify personnel handling NORS data, require states to report breaches of confidentiality to the FCC, allow a provider to audit a state’s handling of its outage data, grant access to NORS only on the condition that such access replace any separate outage reporting required under state law, or allow caveats with respect to the sharing of any data elements.²⁷ Staff proposes that the CPUC oppose all of these other conditions or restrictions enumerated in ¶ 52.

As explained in the CPUC Petition, California has well-established confidentiality protections in place to prevent the public disclosure of NORS data, and the CPUC has already deemed NORS data to be confidential (see D.09-07-019). The CPUC also currently receives from carriers the same NORS data that it seeks in its Petition, without any of the conditions or limitations suggested in the *NPRM*. Thus, no basis exists to impose further conditions simply because the source of the data would be the FCC itself.

The FCC seeks comment “on limitations on states’ use of NORS data.”²⁸ The *NPRM* asks several questions related to the extent of which states may use NORS data: whether states should be required to notify the FCC and service providers if a state seeks to share data with parties outside its direct employ; whether the use of NORS data be restricted to activities relating to states’ “traditional role of protecting public health and safety.”²⁹

²⁵*NPRM*, ¶ 51, at 19.

²⁶ See *NPRM*, ¶ 52, at 19.

²⁷ See *ibid.*

²⁸ See *id.*, ¶ 53, at 19.

²⁹ See *ibid.*

Staff proposes that the CPUC oppose all of these limitations suggested in ¶ 53 for the same reasons staff opposes the conditions in ¶ 52. States should be able to use NORS data consistent with state law and for purposes each state determines.

The FCC asks what data should be shared: “Should states be granted access to the notification, initial, and final reports? Should providers’ outage coordinators information be redacted before the information is shared with states?”³⁰ Staff proposes that all California data in NORS be shared with the CPUC, including VoIP outage reports. In addition to notification, initial, and final reports, states should also receive “withdrawn” reports, which are also submitted in NORS. States should get the data when the carriers’ submit it (contrast this with the FCC’s Form 477 data, which is routinely produced more than a year after the service providers give it to the FCC). Staff also proposes a process for handling any discrepancies found in reports whereby the CPUC will first contact the carrier and then notify the FCC.

The FCC asks about the costs and benefits of sharing state specific NORS outage data with state entities.³¹ The FCC believes that the proposed sharing of NORS data with states would not have an appreciable cost impact.³² Staff agrees with the FCC’s assumption. The FCC already has a similar password-protected process when it shares numbering data with states.³³

Call Failures to PSAPs (Issue 1, ¶¶ 9-18)

The FCC is concerned about the reporting of outages that significantly degrade communications to PSAP(s).³⁴ Some providers may be interpreting Section 4.9(e)(1) narrowly to require reporting only “when a PSAP is rendered unable to receive *any* 911 calls for a long enough period to meet the reporting threshold. Under this interpretation, a failure or degradation that prevents hundreds or even thousands of 911 calls from completing might fail to qualify as a reportable outage if some 911 calls continued to reach the PSAP throughout the event.”³⁵ The FCC proposes to revise Section 4.5e(1) “to clarify that any network malfunction or higher-level issue that significantly degrades or prevents 911 calls from being completed constitutes a ‘loss of communications to

³⁰ *NPRM*, ¶ 53, at 19.

³¹ See *ibid.*

³² See *ibid.*

³³ See CPUC Petition, at 15-17.

³⁴ See *NPRM*, ¶ 12, at 5.

³⁵ See *NPRM*, ¶ 12, at 5.

PSAP(s),’ regardless of whether the PSAP is rendered completely unable to receive 911 calls.”³⁶

Staff proposes that the CPUC support the clarification to the rules that a significant degradation of communication to a PSAP constitutes an outage. The measurement the FCC sets should be easy to understand and to implement, and be reported consistently by carriers. The CPUC, in R.11-12-001, is currently considering adopting reporting rules for outages where access to 9-1-1 falls below the NORS reporting threshold. These smaller, rural communities suffer outages more acutely than urban areas, and alternative means of communications are frequently a long drive away.

Wireless Outage Reporting Metrics (Issue 3, ¶¶ 31-37)

The FCC seeks comment on two possible methods for calculating the number of users “potentially affected” by a wireless network outage.³⁷ The current method³⁸ “has led to inconsistencies in reporting that may compromise the Commission’s ability to reliably detect wireless network outage trends. The lack of a clear and consistent process for measuring and reporting wireless outages also undermines the technology neutrality that lies at the heart of the Part 4 rules.”³⁹

Staff proposes that the CPUC not comment on which approach would be better, but should state that the CPUC agrees with the FCC’s goal of adopting a consistent and standardized process so that data can be accurately obtained and compared.

The FCC seeks comment “on whether to adopt a separate and additional wireless outage reporting requirement based on the geographical scope of an outage, irrespective of the number of users potentially affected.”⁴⁰

³⁶ *Ibid.*

³⁷ See *id.*, ¶ 32, at 12. The two potential approaches, each of which the FCC believes holds the potential to produce more reliable and consistent data than is currently being reported are: (1) “multiplying the number of cell sites disabled as part of the outage by the average number of users it serves per site, assuming for purposes of the calculation that each user is served by a single site and site assignments are distributed by evenly throughout the provider’s network, or (2) “a wireless provider could determine by reference to its Visitor Location Register the actual number of users that were being served at each affected cell site when the outage commenced.” *Id.*, ¶ 33, at 12.

³⁸ Currently, wireless service providers in particular are directed to calculate the number of users “potentially affected” by “multiplying the simultaneous call capacity of the affected equipment by a concentration ratio of 8.” See *id.*, ¶ 31, at 12.

³⁹ *Ibid.*

⁴⁰ *NPRM*, ¶ 34, at 13.

Staff proposes stating that although this issue has been deferred to the next phase of the current proceeding, wireless access to 9-1-1 has been increasing in relevancy each year and hence information about service outages, which affect 9-1-1, is also more relevant. Regarding the reporting requirement, the CPUC has found, from reviewing its wireline outage reports, that both overall trend information and specific location information is important. Averages and overall percentages are useful at the macro level, and then more granular information is required to insure that universal access is achieved.

The FCC proposes that “capacity be allocated to each PSAP in reasonable proportion to its size in terms of number of users served,” rather than Sprint’s proposal of having “providers divide capacity among subtending PSAPs in order to calculate numbers of users potentially affected.” Staff proposes that the CPUC support the FCC’s proposal. California’s PSAPs are on a spectrum of size from large urban to small rural, so this method would show the particular impact to each PSAP more accurately.

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