State of California **Public Utilities Commission**
San Francisco

M E M O R A N D U M

Date : January 17, 2013

To : Commissioners, Advisors
(Meeting of January 24, 2013)

From : Helen M. Mickiewicz, Assistant General Counsel
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Subject : Filing of Comments with the FCC

RECOMMENDATION: The CPUC should file comments in response to two petitions submitted to the FCC regarding the projected transition from a traditional wireline ("TDM"-based technology) telecommunications network to an internet-protocol ("IP"-based technology) communications network.[1] The petitions propose that the Federal Communications Commission (FCC) open a rulemaking to address a host of issues arising from the FCC's plan to transition the nation's communications network within the next eight years. Staff seeks authority to prepare and file comments supporting the proposal to open a rulemaking, and identifying issues of particular interest to California.

BACKGROUND: In March 2010 the FCC issued the National Broadband Plan, which projects a decade-long transition from a traditional wireline (TDM) network to an IP-based network. While the FCC has tackled some discrete issues implicated by the TDM-to-IP transition, the FCC has not yet opened a rulemaking specific to the overarching policies it must adopt for the transition.

AT&T Petition: On November 7, 2012, AT&T filed with the FCC a Petition to Launch a Proceeding Concerning the TDM-to-IP Transition (AT&T Petition). In its Petition, AT&T asserts that 1) incumbent Local Exchange Carriers (ILECs) are subject to disproportionate regulation, and ILECs are no longer dominant in any relevant market; 2)

[1] Time-Division Multiplexing (TDM) is a circuit-switched technology used to provide what is commonly referred to as traditional wireline telephone service, which is commonly delivered to customers over twisted pairs of copper wires, also called "copper loops", which provide the final link between the service provider's network and the customer's premises. This service is also known as Plain Old Telephone Service (POTS). (Versions of TDM are also used on wireless networks.) Internet Protocol (IP)-based services are those that travel over fiber optic cables, wireless facilities, or even copper wires, but use an Internet-based technology in lieu of switched circuits to deliver traffic.

traditional regulations applied to ILECs should be eliminated as part of the transition to an IP-based network, and 3) the FCC should open a rulemaking as a means of approving trials for regulatory reform in "discrete wire centers". The gist of AT&T's petition is a push for regulatory reform, based on its position that "the regulatory environment will influence providers' future investment decisions",[2] and therefore urges the FCC to "open a dialogue … with the express recognition that a twenty-first-century network will require a twenty-first-century regulatory regime."[3] Citing its extensive current and planned investments in next-generation services, IP-based wireline broadband facilities, and deployment of LTE wireless technology, AT&T argues that such investments will be stymied by continued regulation based on a TDM network.

AT&T proposes that ILEC "be able to retire their obsolete TDM-centric networks and invest in IP broadband facilities and services that will enable them to offer consumers more robust competitive alternatives".[4] Specifically, AT&T recommends discontinuance of a statutory requirement that carriers seeking to exit service in a community must first obtain permission from the FCC.[5] To further that goal, AT&T echoes the position that USTelecom advocated in a February 2012 petition to the FCC for forbearance from the § 214 service termination requirement.[6] In addition, AT&T supports USTelecom's request for forbearance from the Commission's short-term notice of-network-change rules regarding notice to carriers of network changes.

AT&T seeks elimination of state-imposed rules pertaining to "on demand telecommunications services [provided] to all customers in a given geographic area".[7] While AT&T does not use the term, this appears to be a reference to "carrier-of-last-resort" (COLR) requirements. Claiming that continuing to meet state COLR obligations would require it to maintain two networks, AT&T argues that even the threat of COLR obligations in an all-IP world would discourage investment.[8] AT&T advocates moving towards "a rational procurement model for ensuring universal service" based on voluntary carrier service commitments for which the carrier would receive universal service funding.[9]

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[2] AT&T Petition, p. 4.

[3] *Id.*

[4] *Id*., p. 11.

[5] *Id*., p. 13; *see* 47 U.S.C. § 214(a): "No carrier shall discontinue, reduce, or impair service to a community, or part of a community, unless and until there shall first have been obtained from the Commission a certificate that neither the present nor future public convenience and necessity will be adversely affected thereby.

[6] *Id*.; the FCC has not yet acted on the USTelecom petition.

[7] *Id*., p. 15.

[8] *Id*., p. 16.

[9] *Id*., p. 17.

AT&T further argues that all Voice over Internet Protocol (VoIP) services "are appropriately classified as interstate information services over which the Commission has exclusive jurisdiction"[10] In addition, AT&T proposes elimination of the following: "equal access" obligations, by which customers have competitive choice of "local" and "long-distance" carriers; "dialing parity," which allows customers to pre-select a long-distance provider; and legacy copper loop requirements, whereby ILECs retain copper distribution facilities even where they have upgraded trunks to fiber-optic facilities.[11]

Finally, AT&T asks the FCC to open a rulemaking "to consider implementing a number of geographically limited trial runs" that AT&T believes would help facilitate the transition to an all IP-network.[12] Specifically, AT&T urges the FCC to ask ILECs to submit proposals for specific wire centers (or rate centers) where the trials would be conducted.[13] AT&T proposes first that within the designated wire centers, "outdated' telephone company' regulations" that might require maintenance of legacy networks be eliminated.[14] Second, AT&T argues that in the trial wire centers, the FCC "preclude carriers (including carrier customers) from demanding service or interconnection in TDM format".[15] Third, AT&T proposes that in the trial wire centers, the FCC implement reforms to "facilitate the migration of end-user customer from legacy to next-generation services", and in particular, permit service providers to notify customers that TDM services will no longer be available.[16] "As AT&T envisions these trial runs, the Commission would also keep IP services free of legacy regulation so that the trial may proceed without [the] distorting and investment-chilling effects of such regulations".[17]

NTCA Petition: On November 19, 2012, the National Telecommunications Cooperative Association (NTCA) filed with the FCC its Petition for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution (NCTA Petition).[18] group that represents Rejecting approaches that would tear down the foundation of the current regulatory scheme, or leave the foundation standing without change, NTCA advocates instead a "balanced approach of 'smart regulation' that examines what has worked (or not) in

[10] *Id.*, p. 18. VoIP service is a voice service delivered using Internet Protocol. Contrary to AT&T's claim, the FCC has not classified VoIP as an "information service".

[11] *Id.,* pp. 18-20.

[12] *Id*., p. 20

[13] *Id*.

[14] *Id.,* p. 21.

[15] *Id.*

[16] *Id*., pp. 21-22.

[17] *Id.*, p. 22.

[18] NTCA is an industry association representing nearly 600 network service operators across rural America.

protecting consumers, promoting competition, and ensuring universal service".[19] More specifically, NTCA proposes that the Commission should strive for balance.

> [T]he Commission should seek to maintain certainty by retaining and reasserting a firm and clear regulatory foundation, while coordinating with state counterparts to examine specific bricks for potential replacement, repair, or removal where their utility or effectiveness is in question.[20]

NTCA then recommends three steps for the FCC:

1) Develop a list of specific existing regulations that may have limited or no applicability in the IP-world.

2) Seek comment on which of the identified regulations (a) might be eliminated to enhance the migration to an IP-world; (b) might be retained in current form to protect consumers, promote competition, or ensure universal service; and (c) might be retained but modified to further the evolution to an IP-world.

3) Set a firm but reasonable deadline to complete this "refreshing" of the governing regulatory framework.[21]

NTCA also proposes that the FCC pair its proposed "smart regulation" review with near-term economic incentives that would stimulate the continuing IP evolution. NTCA suggests, for example, that the FCC should consider an incentive-based mechanism that would allow carriers to recover costs for the exchange of communications traffic where they agree to make available IP-based interconnection in accordance with the existing statutory framework.[22] Specifically, NTCA urges the FCC to (a) confirm that all interconnection for the exchange of traffic is governed by provisions of the Communications Act, regardless of the type of technology used to achieve interconnection, and (b) provide carriers with an incentive to offer IP interconnection by allowing them to recover in rates the costs exchanging IP traffic.[23] NTCA posits that there are "sound economic and policy justifications for adopting" near-term measures to stimulate and sustain investments in IP-enabled networks.[24]

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[19] NCTA Petition, pp. ii, 5-10.

[20] *Id*., p. 10.

[21] *Id*., p. 12.

[22] *Id*., p.

[23] *Id*., p. 14.

[24] *Id*., p. 15

DISCUSSION AND RECOMMENDATIONS:

Staff proposes that the CPUC submit comments supporting the proposal of both AT&T and NTCA that the FCC open a rulemaking to begin to address and resolve the myriad issues presented by the transition from a TDM-based telecommunications network to an IP-based network, already underway. Staff also recommends that the FCC open a rulemaking consistent with what NTCA proposes, i.e., a proceeding in which the FCC examines how the existing regulatory structure might be adapted to a new all-IP world without sacrificing consumer protection, competition or universal service. For example, given that the FCC has yet to resolve how universal service would be funded in an IP-world, it would be detrimental for the FCC to adopt AT&T's proposal to eliminate existing regulations governing provision of universal service. Further, the FCC must consider and resolve the role of the states both in overseeing provision of universal service (in all its forms at the state level), and in ensuring that consumers are protected.

Accordingly, recognizing that the TDM-to-IP transition is inevitable does not mean that all regulation established in the TDM world should be eliminated, as AT&T's petition seems to suggest, or that TDM service should entirely disappear at some date certain in every jurisdiction. AT&T's petition outlines regulatory changes that it proposes are necessary for migration to an all-IP network, even though that migration already is occurring without those regulatory changes. The FCC must now determine what regulatory changes are needed while ensuring that this network migration does not degrade the network or the services customers purchase. To that end, the FCC should resolve how, for example, any necessary regulatory changes can be effected yet still preserve consumer protection, network reliability, and affordable service.

Even more importantly, the AT&T petition in particular raises questions about state jurisdiction. The provision of local telephone service historically has been in the purview of the states, which approve applications to serve in specific areas as well as requests to withdraw service, which establish Carrier of Last Resort (COLR) obligations, and which, pursuant to delegated federal authority, maintain rules regarding access to rights-of-way. The AT&T proposal necessarily posits the question of whether states or the FCC can determine whether COLR obligations and concomitant withdrawal of service, as well as authority over utility poles, can be abrogated in the context of all-IP trials. The jurisdiction of the FCC or the federal government to consider ordering the closure of any wire center that serves an intrastate telephone service must be addressed before considering the potential merits of any proposal to begin trials of all-IP networks in specific wire centers. Staff suggests two possible paths for conducting any such trials, in light of the states' and constitutional jurisdiction. One would be for the FCC to hold such trials only in states that have no COLR requirements and do not require state approval for withdrawal of service. Concomitantly, the FCC could work with the states to ensure that issues of fundamental concern to state commissions are addressed in the move towards setting up trials in multiple states consistent with state jurisdiction and rules, the federal

and state constitutions, the Communications Act of 1934, and other applicable federal and state statutes. The NTCA approach of examining the existing regulatory scheme to see what works and what does not, or rather what likely would work and what likely would not in an all IP-world, is a more rational approach.

Further, rather than recommend at this juncture that the CPUC offer or support specific proposals, staff considers it more important to identify clusters of issues the FCC should address in a rulemaking.

Issues raised by AT&T's proposal for all-IP trials include the following:

1) Does the FCC have authority to pre-empt state jurisdiction over intrastate services, such as provision of POTS, COLR obligations, rules pertaining to service quality or service withdrawal, rules pertaining to consumer protection, rights of way, pole attachments, and other state regulations?

2) Should trial wire centers be located only in states that have eliminated COLR obligations and do not require state approval for withdrawal of service?

3) Would customers be given a choice to migrate, or would migration be imposed? Is there practical way to allow customers to choose not to migrate for purposes of the trial?

4) Would those ILECs in the trial area(s) currently required to provide competitive carriers access to UNEs continue to be required to do so during the trial(s)?

5) Recognizing that long-term maintenance of two co-existing networks could be prohibitively costly, could two networks be maintained for purposes of the trials, and, if so, what are the pros and cons of doing so? Further, what does the word "network" mean in this context? In what ways do IP-networks depend upon facilities that also provide TDM services such that while the services may change and the transmission protocol be modified, the physical facilities continue to constitute the basis of the network independent of transmission protocols?

6) What criteria will be in place to measure the success of the trials? Who will develop those criteria? Who will judge whether they have been met in practice? On what basis will discrimination between useful technological advances and appropriate regulatory changes be arbitrated?

7) Would elimination of obligation-to-serve regulations mean that AT&T could terminate customers in the course of the trial? Would the universal service obligations states impose be preserved for the trials or eliminated? If eliminated, how would states ensure that customers in need can obtain service?

8) How would pricing of service(s) work in the trials? Would a customer who today subscribes to stand-alone basic service be required to purchase a bundled service package once migrated to IP-based service as part of the trial?

9) What consumer protections would remain in place? For example, where would customer complaints about services offered or prices charged during the trials be heard and resolved? Who would enforce the rules adopted for the trials?

10) How would concerns such as power backup, reliability, emergency access, and quality of service be addressed in the trials? What role would the states play in making these assessments?

Finally, the CPUC should address NTCA's proposal for the FCC to confirm the status of interconnection in the all-IP world. NTCA's recommendation, however, that the FCC deem all interconnection subject to sections 251 and 252 of the Communications Act would be inconsistent with the Act, which states that only providers of "telecommunications services" are afforded the rights, duties, and protections of sections 251 and 252. While CPUC staff sees great value in ensuring that IP-based service providers can and should interconnect freely with TDM-based networks and be bound by obligations to interconnect and complete calls regardless of network protocol, the FCC to date has not determined that IP-enabled or Voice over Internet Protocol (VoIP) services are, in fact, telecommunications services. The FCC must resolve that question before affording providers of IP-based services the rights, duties, and protections of sections 251 and 252.

Certain other policy issues also need to be addressed in any proceeding established to guide the transition to IP networks, whether or not the FCC institutes trials. The CPUC outlined various issues in its December 18, 2009 filing with the FCC *In the Matter of Comment Sought on Transition from Circuit-Switched Network to All-IP Network.* These issues include, among others, how to define universal service, COLR obligations, service quality regulation, and numbering administration. Furthermore any proceeding should address how the IP Transition should be implemented such that it avoids creation of an "IP Divide." And obviously the role of the states in communications regulation v. the role of federal government, both during and after the transition, needs to be addressed.

Staff seeks authority to submit comments on behalf of the CPUC that would set forth the issues addressed here and propose that the FCC address the questions presented in this memo.

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