

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Investigation into the State of  
Competition Among Telecommunications  
Providers in California, and to Consider and  
Resolve Questions raised in the Limited  
Rehearing of Decision 08-09-042.

I. 15-11-007  
(Filed November 5, 2015)

**OPENING COMMENTS OF THE UTILITY REFORM NETWORK ON THE  
PROPOSED DECISION OF ADMINISTRATIVE LAW JUDGE BEMESDERFER**

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Dated: November 7, 2016

**TABLE OF CONTENTS**

**I. INTRODUCTION ..... 1**

**II. THE MARKET ANALYSIS COMPELS THE COMMISSION TO ACT TO PROTECT CALIFORNIA CONSUMERS ..... 2**

**A. Broadband Markets..... 3**

**B. Wireless Mobility Markets ..... 4**

**C. Voice Services ..... 5**

**D. Market Concentration Must Be Addressed..... 8**

**III. WHOLESALE INPUT PRICES ARE RELEVANT WHEN CONSIDERING RATE INCREASES ..... 9**

**IV. THE IMPACT OF INTEGRATED SERVICE PROVIDERS IS NOT PROPERLY ACCOUNTED FOR IN THE PROPOSED DECISION’S ASSUMPTIONS ..... 10**

**V. INVESTMENT, AFFORDABILITY, AND THE DIGITAL DIVIDE ..... 11**

**VI. SERVICE QUALITY AS A MARKER FOR MARKET CONCENTRATION 14**

**VII. RECORD EVIDENCE OF SUPPLY AND DEMAND ELASTICITIES ..... 15**

**VIII. 5G WIRELESS SPECULATION SHOULD NOT BE BASIS FOR CONCLUSIONS..... 17**

**IX. AT&T’S INVESTMENT FAILURE AT THE CORE OF ANALYSIS..... 18**

**X. WHOLESALE MARKETS DEMAND FURTHER ACTION BY COMMISSION ..... 19**

**XI. PROPOSED DECISION DOES NOT PROVIDE AN ADEQUATE RATIONALE FOR ITS “DO NOTHING” APPROACH..... 20**

**XII. THE PROPOSED DECISION HAS NO FINDINGS RE TURN AND ORA’S APPLICATION FOR REHEARING..... 22**

**XIII. THE COMMISSION SHOULD OPEN A SECOND PHASE FOR NEXT STEPS..... 23**

**XIV. CONCLUSION ..... 25**

**TABLE OF AUTHORITIES**

**State Statutes**

Public Utilities Code §709 ..... 13  
Public Utilities Code §276.5(a) ..... 13  
California Constitution, Article XII ..... 13

**Commission Decisions**

D.06-08-030 ..... 18, 24  
D.08-09-042 ..... 2, 23  
D.15-11-023 ..... 2, 23

**Other Sources**

Department of Justice Horizontal Merger Guidelines (2010) ..... 4  
Communications Division 2015 Market Share Report ..... 6  
Board of Governors of the Federal Reserve System, *Communications Equipment Price Indices* (August 2015) ..... 10

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**I. INTRODUCTION**

Pursuant to Rule 14.3 of the Rules of Practice and Procedure, The Utility Reform Network (“TURN”) files these opening comments on the Proposed Decision of Administrative Law Judge Bemederfer in the above referenced proceeding. TURN commends the Commission for opening this proceeding in the face of fierce opposition from the telecommunications industry. In spite of unprecedented industry attempts to derail this investigation, limit the inquiry, and limit the collection of pertinent data, the Commission moved forward to build a comprehensive record that reflects the current state of the telecommunications marketplace in California.<sup>1</sup> TURN supports many of the findings in the Proposed Decision as evidence-based and data-driven, such as the conclusion that consumers face highly concentrated markets for telecommunications transport services and that there is little evidence of price competition. However, as discussed below, the Proposed Decision is internally inconsistent in its analysis, leading to errors of fact and law resulting from incomplete or incorrect interpretations of the record.

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<sup>1</sup> TURN counts no fewer than 19 substantive motions filed by carriers either separately or as part of a coalition (not including procedural motions regarding party status or shortening time to respond).

TURN acknowledges that the Commission identified this initial stage of the proceeding as a fact-finding and analysis effort.<sup>2</sup> However, in light of findings of extremely high levels of market concentration, particularly in the residential broadband market, TURN believes that the Proposed Decision is in error when it closes the proceeding with no specific remedies to address the identified market failures beyond monitoring and reporting.

TURN finds further error with the Proposed Decision because it neglects to include any findings or discussion related to the Application for Rehearing filed jointly by TURN and the Office of Ratepayer Advocates (“ORA”). As the Commission is well aware, TURN and ORA were granted a limited rehearing of certain issues related to D.08-09-042. The Commission directed that the rehearing be considered within the instant Investigation, yet, the Proposed Decision presents no findings specifically on the rehearing issues.<sup>3</sup>

Therefore, TURN recommends that the Commission keep this docket open and schedule a set of workshops within three to six months of the Final Decision, along with other opportunity for meaningful stakeholder input, to revise the scope of the docket, design narrowly tailored regulatory responses to documented market failures, and further specify the reporting and monitoring requirements contemplated in this Proposed Decision. TURN urges the Commission to revise the Proposed Decision as discussed below.<sup>4</sup>

## **II. THE MARKET ANALYSIS COMPELS THE COMMISSION TO ACT TO PROTECT CALIFORNIA CONSUMERS**

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<sup>2</sup> See, July 1, 2016 Scoping Memo, p. 7; See also, statements by Commissioner Peterman at January 25, 2016 PHC, RT 12:20-28, “In fact, the OII would not require this Commission to impose any new regulations whatsoever. We are engaged in data collection and data analysis aimed at understanding the viability of the premises of URF 2 including the state of competition in the intermodal voice market or markets.”

<sup>3</sup> See, D.15-11-023 and *Order Instituting Investigation to Assess the State of Competition Among Telecommunications Providers in California, and to Consider and Resolve Limited Rehearing of Decision (D.) 08-09-042* (“OII”), at 7.

<sup>4</sup> In light of TURN’s overarching concerns, we did not attempt to redline all of its issues as discussed below, but does provide a redline of the highest priority and relevant FOF, COL and OPS.

The Proposed Decision notes, “this Investigation has focused on telecommunications transport - the transmission of information (be it voice or data) of the user’s choosing, without change in the form or content of the information as sent and received.”<sup>5</sup> What is clear from the evidence, as summarized by the Proposed Decision, is that consumers face highly concentrated markets for telecommunications transport in many relevant geographic, demographic and product markets.<sup>6</sup> Moreover, the level of price competition is unclear, undocumented and potentially muted by bundled pricing.<sup>7</sup> The Proposed Decision endorses evidence presented by TURN, ORA, WGAW, and CALTEL that provides a clear picture of market failure. The impacts of market failure are lower levels of consumer choice and investment, harms to both general and specific populations in the state, harms to innovation, and, ultimately, a weakness in the economic competitiveness of the state. Unfortunately, the actions proposed in the Proposed Decision to remedy the market failures that are documented therein are only tiny steps in the right direction, steps so tiny as to simply endorse a *status quo* in which California consumers continue to be harmed by the carriers’ exercise of market power. The Commission must correct the Proposed Decision’s deficiencies by requiring specific remedies for the market failures that TURN and other parties have identified.

#### **A. Broadband Markets**

Consistent with TURN’s conclusions, the Proposed Decision finds that fixed and mobility broadband markets are separate.<sup>8</sup> For residential fixed broadband, the Proposed Decision also finds that competition is limited, especially for high quality broadband as

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<sup>5</sup> Proposed Decision of ALJ Bemserfer (“Proposed Decision”), at 61-62.

<sup>6</sup> Proposed Decision, 3-4, 9, 11-12.

<sup>7</sup> Proposed Decision, 4, 120-121.

<sup>8</sup> Proposed Decision, at 40.

measured by the 25/3 Mbps standard established by the Federal Communications Commission (FCC), which the Proposed Decision indicates, “represents a useful, reasonable, and forward-looking dividing point to define a “high-speed” broadband tier.”<sup>9</sup> Here the Proposed Decision points to evidence presented by TURN and ORA that indicates that about 69% of California households have only *one* service provider (i.e., a monopoly) or no availability at all (about 3% of households).<sup>10</sup> For the overall fixed broadband market, the Proposed Decision finds growing concentration statewide, as demonstrated by the Herfindahl-Hirschman Index (HHI) market concentration measures used by the Department of Justice with values of 4,687 (nearly double the Department of Justice’s “Highly Concentrated” benchmark). For large counties, such as Los Angeles, Sacramento, San Diego, and San Jose, the Proposed Decision reports that HHI values are over 5,000. The Proposed Decision concludes that, “the residential broadband market is the most concentrated retail market analyzed in this proceeding.”<sup>11</sup> This evidence of market failure, however, is not acted upon in the Proposed Decision. As noted above, market failure results in substantial harms to consumers, businesses, and the competitiveness of the state that should not be left to the *status quo* of this market.

## **B. Wireless Mobility Markets**

The Proposed Decision also identifies increasing concentration in wireless mobility service markets<sup>12</sup> that provide telecommunications transport for voice, data, and text services.

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<sup>9</sup> Proposed Decision, at 44.

<sup>10</sup> It is puzzling that at a later point, when discussing “the problem of information,” the Proposed Decision indicates that, “The multiple estimates of availability at the 25/3 benchmark, as set forth above, indicate how data can be viewed through multiple prisms or filters.” (Proposed Decision, at 111.) Yet, the only data presented in the Proposed Decision regarding 25/3 Mbps service availability is that of TURN’s Dr. Roycroft and ORA’s Dr. Selwyn. It is clear from the tables presented on p. 83 of the Proposed Decision that Dr. Roycroft and Dr. Selwyn found nearly identical market conditions.

<sup>11</sup> Proposed Decision, at 87.

<sup>12</sup> Proposed Decision, at 68, and Finding of Fact, 7(b).

The Proposed Decision relies on proprietary data submitted by mobility providers<sup>13</sup> to show that in major markets in the state, mobility voice concentration ranges from a “moderately concentrated” 2,217 in Los Angeles County to HHI values of over 3,000 in San Diego and San Francisco.<sup>14</sup> The Proposed Decision also reports that concentration is increasing throughout the state.<sup>15</sup> This market failure contributes to the harms facing consumers, for example, because this increasing market concentration prevents wireless carriers from providing market discipline for the rates, terms and conditions of wireline voice services.

### **C. Voice Services**

The Proposed Decision separately considers fixed and mobility voice markets, but then relies on the intermodal market approach to find that concentration has declined over time.<sup>16</sup> But the intermodal approach advanced by the Proposed Decision - that the “competitive whole” is equal to the “sum of the wireline and wireless parts”- is not reasonable. While the Proposed Decision concludes that there is “intermodal” voice competition, it also indicates that the wireline voice market is “highly concentrated,” with reported HHI values near or above 5,000 in California urban areas.<sup>17</sup> Similarly, the wireless mobility market is also highly concentrated, with statewide HHI above 2,600 and major market areas showing HHI values above 3,000.<sup>18</sup>

The Proposed Decision is critical of Respondent witnesses who point to a “six-network” theory regarding the dynamics of competition in consumer voice markets (under this theory, a

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<sup>13</sup> TURN and other parties did not get access to this proprietary data and therefore cannot provide an independent analysis or substantive comment on the Proposed Decision’s analysis of market concentration in the wireless or wireline markets. TURN finds that these market share numbers confirm its analysis of publicly available data demonstrating high levels of market concentration, but argue that the Commission commits legal error when it relies on data and analysis that is only available to a select group of parties to reach its findings.

<sup>14</sup> Proposed Decision, at 67.

<sup>15</sup> Proposed Decision, at 68.

<sup>16</sup> Proposed Decision, at 73.

<sup>17</sup> Proposed Decision, at 65.

<sup>18</sup> Proposed Decision, at 67.



household can choose voice services from the ILEC, cable provider, or from among four wireless carriers).<sup>19</sup> As the Proposed Decision notes, this theory overlooks the fact that AT&T is, (and until recently, Verizon was) an integrated provider of wireline and wireless voice services. Any customer in AT&T's service area has, at most, only two choices for wireline voice. If "cutting the cord" is a reasonable option (which over one-half of California households have demonstrated is a not reasonable choice),<sup>20</sup> customers can choose service offered through the unaffiliated wireless operators Sprint, T-Mobile, and Verizon Wireless with varying degrees of network quality depending on the location. As the Proposed Decision notes, such a provider count can only mean that the level of voice service concentration is "moderate" for consumers residing in AT&T's service area.<sup>21</sup> This analysis also indicates that the low level of statewide concentration identified in the Staff's *2015 Market Share Report* does not reasonably reflect the situation in AT&T's service area.<sup>22</sup> As discussed by Dr. Roycroft, this report inappropriately relies on assumptions regarding intermodal competition and contains contradictory statements regarding the level of market concentration among wireline and wireless markets.<sup>23</sup>

Furthermore, the Proposed Decision indicates that despite the review of market data, the Commission cannot determine the extent to which wireless mobility voice services constrain wireline voice prices:

While we agree that there is imperfect (horizontal or adjacent-market) price discipline, and that the wireless alternative operates as a "check on residential local wireline phone prices," *we are unable to quantify the extent of price discipline that wireless service provides with respect to landline service. We further note that any*

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<sup>19</sup> Proposed Decision, at 68.

<sup>20</sup> Exh. 54 (Roycroft June), at 10.

<sup>21</sup> Proposed Decision, at 51.

<sup>22</sup> See, Proposed Decision, at 73.

<sup>23</sup> Exh. 54 (Roycroft June), 79-80; In her rebuttal testimony (Exh 7), p. 14, Dr. Aron agrees that the CD Staff Report errs by not looking at all wireline technologies together, including VoIP.

*inefficiency within the wireless market will mute the price discipline that wireless would otherwise exert on landlines.*<sup>24</sup>

The ambiguity regarding wireless service's potential to constrain wireline prices supports the proposition that market forces are not sufficient to ensure just and reasonable basic service rates.

But the moderate market concentration and the inability to quantify the magnitude of the price constraint of wireless voice service on wireline voice service are not the only red flags with regard to the state of competition for basic voice services. The Proposed Decision also notes the limitations faced by some consumers in their ability to substitute away from wireline services:

We find several other arguments intervenors make more persuasive. Wireless service is not available throughout California. Where coverage is poor, mobile telephony is not a reasonable substitute for landline service. As CforAT argues, there are also some customers in California with particular communications needs—like medical devices or Teletypewriter (TTY) and relay service—that are best (or even only) served by landlines.<sup>25</sup>

Furthermore, the Proposed Decision raises concerns regarding the relationship of voice and broadband markets, in light of the fact that broadband markets are highly concentrated:

The voice market is tied to the broadband market in a number of ways, including: (1) broadband is the network means of transmitting VoIP, one of the intermodal competitors foreseen by URF I; (2) with the high incidence of service bundling, and the increased importance of broadband Internet access, for many consumers the voice and broadband markets have converged; and (3) traditional phone calls and broadband data services utilize the same physical network.<sup>26</sup>

The Proposed Decision also states “it is only possible to understand the present-day voice market by understanding the broadband market of which it is a small but still important part.”<sup>27</sup>

TURN agrees. Indeed, the undeniable and extremely high level of concentration in the wireline

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<sup>24</sup> Proposed Decision, at 37 (emphasis added).

<sup>25</sup> Proposed Decision, at 36.

<sup>26</sup> Proposed Decision, Finding of Fact 14, at 158.

<sup>27</sup> Proposed Decision, at 26.

broadband market severely constrains the potential for effective competition to exist in voice service markets. The fact that the voice service market is “tied” to the poorly performing broadband market<sup>28</sup> further reinforces concerns expressed by TURN regarding the ability of consumers who continue to rely on wireline services to find service at rates that are just and reasonable.<sup>29</sup> Due to the lack of effective competition in broadband markets, the bundles of voice and broadband services available to consumers are priced at levels that would not be sustainable in a market subject to effective competition.<sup>30</sup>

#### **D. Market Concentration Must Be Addressed**

As the Proposed Decision elsewhere illustrates, basic service rates have increased dramatically during the period in which the Incumbent Local Exchange carriers (ILECs) have had pricing flexibility.<sup>31</sup> The Proposed Decision is fundamentally flawed because it fails to reach the conclusion that its various individual findings clearly support. The Proposed Decision makes key accurate observations and findings, with which TURN agrees and which the evidence fully supports: (1) the broadband market, which is inextricably and increasingly tied to the voice market, is highly concentrated, which, in turn, means that voice service bundled with broadband cannot be relied on to constraint stand-alone basic voice service; (2) the fact that wireless markets are concentrated means that they cannot be relied upon to discipline wireline voice service and moreover some customers cannot substitute away from wireless service; and (3) the prices for basic voice service have risen apart from changes in cost and other economic inputs.

Yet despite these three key findings, the Proposed Decision inexplicably fails to link these important analyses together to reach the obvious conclusion – markets are not sufficiently

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<sup>28</sup> Exh. 54 (Roycroft June), at 117-128.

<sup>29</sup> Exh. 54 (Roycroft June), at 111-114.

<sup>30</sup> Exh. 54 (Roycroft June), at 117-130.

<sup>31</sup> Proposed Decision, at 120.

competitive to yield just and reasonable rates for basic voice service. For example, given that the Proposed Decision agrees with TURN that some customers cannot easily substitute to wireless-only options,<sup>32</sup> there is no question that basic service rates continue to be important to those customers with limited choice. The lack of any action regarding basic service price increases is perhaps the most disappointing element of the Proposed Decision. There is no dispute that the Commission has the authority to address basic service rates. The failure to exercise this authority has real consequences for California consumers.

### **III. WHOLESALE INPUT PRICES ARE RELEVANT WHEN CONSIDERING RATE INCREASES**

While acknowledging that basic service rates have increased substantially in nominal terms, the Proposed Decision also presents data designed to assuage concerns regarding the magnitude of those rate increases, showing basic service rates adjusted for general inflation trends.<sup>33</sup> However, the record does not support using an inflation analysis here. Dr. Roycroft's testimony states that when it comes to determinations of "just and reasonable" rates, costs of service have long been the touchstone. The data in Table 1 reflects Dr. Roycroft's testimony that price trends for technology products do not track general inflation and have shown a decline and then flattening out over time.<sup>34</sup> Data in Table 1 shows wholesale inflation trends for telecommunications equipment, including local loops and central office equipment.<sup>35</sup>

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<sup>32</sup> Proposed Decision, at 39-40.

<sup>33</sup> Proposed Decision, at 122.

<sup>34</sup> Exh. 54 (Roycroft June), 121-122; See also Exh. 53 (Baldwin March), at 25 (discussing productivity offsets for setting rates) and at 26 (discussing cost analyses).

<sup>35</sup> In response to evidence presented by Dr. Roycroft on the decline of the cost of broadband transit, the Proposed Decision states: "We note, however, that broadband relies not just on electronic technology products, but also on physical and intangible infrastructure we have already discussed: poles, conduit, wires, wireless spectrum, interconnection or peering agreements, and other carrier equipment, and Moore's law does little to affect the costs of those inputs." (Proposed Decision, at 141) The data shown in Table 1 show otherwise on this matter.

**Table 1: Communication Equipment Price Trends (Specific ILEC input price trends shown in the highlighted column.)**

	Wireless (cellular) networking equipment	Data networking equipment	Transmission, local loop, and legacy central office equipment	Enterprise and home voice equipment
2002	100	100	100	100
2003	80.458	84.868	83.198	87.415
2004	69.886	73.782	75.033	78.136
2005	68.639	65.858	65.298	71.605
2006	64.732	60.289	58.735	70.011
2007	61.244	54.139	53.37	68.112
2008	50.005	50.069	48.131	64.706
2009	43.337	43.906	44.489	61.067
2010	38.84	38.624	38.123	57.06
2011	37.438	32.527	34.291	54.505
2012	34.223	29.513	29.977	51.962
2013	31.412	26.767	25.763	50.255

Source: Board of Governors of the Federal Reserve System. Communications Equipment Price Indices. August 2015.  
[http://www.federalreserve.gov/releases/g17/commequip\\_price\\_indexes.htm](http://www.federalreserve.gov/releases/g17/commequip_price_indexes.htm)

Table 1 clearly shows that price trends, including the steep decline in price inflation for communication equipment, are most relevant for evaluating basic service rate increases and the data do not support or justify the increase in basic rates in California.<sup>36</sup> Juxtaposing these wholesale price trends with dramatically increasing retail prices suggests that market power has been abused by California ILECs.

**IV. THE IMPACT OF INTEGRATED SERVICE PROVIDERS IS NOT PROPERLY ACCOUNTED FOR IN THE PROPOSED DECISION’S ASSUMPTIONS**

The Proposed Decision notes that “the largest ILEC (AT&T) is a corporate affiliate of one of the largest wireless carriers (AT&T Wireless) and, until recently, the same relationship existed between Verizon California and Verizon Wireless.”<sup>37</sup> Therefore, the Proposed Decision acknowledges that it is unreasonable to count AT&T and (until recently) Verizon Wireless as

<sup>36</sup> Exh. 54 (Roycroft June), at p. 121.

<sup>37</sup> Proposed Decision, at 69.

independent sources of supply, as those companies are affiliated with wireline voice operators of the same name. The Proposed Decision is correct that these affiliations undermine Mr. Gillan's "six-network" market theory for consumer voice. However, the Proposed Decision overlooks other important, and uncontested, evidence presented by TURN regarding the impact of these wireline/wireless affiliations.

As noted by Dr. Roycroft, integrated providers of wireless and wireline services have incentives to pursue pricing strategies that deliver higher wireline prices. Wireline voice providers are constrained to some extent by wireless substitution. The mechanism associated with this constraint is the fact that wireline price hikes will lead consumers to cut the cord, resulting in lost revenues.<sup>38</sup> AT&T faces different incentives due to its integrated wireline/wireless operations. For example, wireline rate increases do not result in the complete loss of revenue because wireless affiliates will benefit from either increased subscription or increased usage associated with a portion of cord cutting customers. Dr. Roycroft noted that both AT&T and Verizon increased basic service rates<sup>39</sup> to levels that exceeded those of the smaller ILECs Frontier and Consolidated.<sup>40</sup> The Proposed Decision fails to recognize these incentives, and thus overlooks a key issue as to why price regulation of basic service rates continues to be appropriate.

## **V. INVESTMENT, AFFORDABILITY, AND THE DIGITAL DIVIDE**

The Proposed Decision acknowledges the growing and real problem of the *Digital Divide*

The so-called "digital divide" between geographic and economic subgroups of the State's population has widened. Those Californians who lack reliable and affordable

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<sup>38</sup> Exh. 54 (Roycroft June), at 128.

<sup>39</sup> TURN notes that although Verizon California no longer provides local telephone service in California, its predecessor, Frontier Communications, has adopted the rates for basic service charged by Verizon. Therefore, to the extent Verizon's basic service rates were not "just and reasonable" and did not reflect a meaningful level of competitive pressure, the same is then true for Frontier's current basic service offering in the Verizon territory.

<sup>40</sup> Exh. 54 (Roycroft June), at 129-130.

access to that network are unable to participate fully in the economy and society of the 21<sup>st</sup> century. For rural and tribal Californians, the “digital divide” stems largely from the lack of sufficient deployment of telecommunications services. For low-income Californians, the “digital divide” stems largely from the unaffordability of telecommunications services.<sup>41</sup>

In this Finding of Fact, the Proposed Decision identifies the lack of investment and unaffordability of telecommunications services as the driving factors of the digital divide. The Proposed Decision does not acknowledge, however, that the record reflects an interrelationship between the lack of carrier investment in its networks and affordability of telecommunications services. As discussed in the evidence presented by TURN, AT&T failed to invest in high quality broadband and this failure has resulted in higher prices and poor service quality for California consumers due to the lack of competition that is present throughout the state.<sup>42</sup> The impact from this lack of investment goes beyond rural and tribal populations to hurt the working poor, those in poverty, and struggling small businesses. These higher prices make broadband services less affordable for all. The Commission must not ignore record evidence of the inelastic nature<sup>43</sup> of demand for telecommunications services and the impact that this inelasticity has on consumers. As a result, consumers will be more likely to pay the unreasonable and inflated rates, and cut back on other purchases, rather than going without essential telecommunications. It is this type of unjust and unreasonable outcome, as documented in this case, that the Commission must work to prevent.

It is unfortunate and disappointing that the Proposed Decision appears to conclude that little can be done about the very real problem of the digital divide and related “major” market failures because they are “inherent” and inevitable:

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<sup>41</sup> Proposed Decision, at Finding of Fact 10 at 158.

<sup>42</sup> Exh. 54 (Roycroft June), at 98-104 & 117-128.

<sup>43</sup> See, for example, Exh 5 (Aron June 1), at 31, citing Michael R. Ward and Glenn A. Woroch, “The effect of prices on fixed and mobile telephone penetration: Using price subsidies as natural experiments,” *Information Economics and Policy* 22 (2010), p. 21.

Dr. Roycroft sees the resulting digital divide as a “major market failure,” and we agree. *It may be, however, that this is an inherent failing of all markets, or at least all telecommunications markets. No matter how competitive, some customers will not be served at, or be able to afford, market rates.*<sup>44</sup>

Problems such as these are precisely the reason why the California Legislature created the Commission.<sup>45</sup> While the Proposed Decision points to the existence of its Public Purpose Program (“PPP”) as the solution, the Commission should recognize that the effectiveness of any PPP depends on whether or not it addresses overarching market failures more broadly. The Proposed Decision elsewhere points to the Kingsbury Commitment as reflecting the genesis of universal service commitments.<sup>46</sup> Yet the Kingsbury Commitment, a 1913 agreement by AT&T to interconnect with unaffiliated telephone companies, was not enough to ensure universal service. Rather, as the Proposed Decision also acknowledges, rate regulation was the ultimate tool used to ensure universal service and just and reasonable rates. Cost-based and affordable rates for telecommunications services provide the foundation for eliminating market distortions in those markets that are not subject to effective competition.

However, should the Commission proceed to address the market failures that it clearly documents in the Proposed Decision through PPPs alone, the continuing underlying distortions will adversely affect all California consumers (and the California economy). These distortions, such as higher prices for broadband, which the record clearly demonstrates,<sup>47</sup> place a tax on California consumers that reduces their discretionary spending, and hinders innovation by discouraging the adoption of broadband technology. Higher rates for broadband associated with a general market failure also means carriers will demand higher subsidies to participate in PPPs

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<sup>44</sup> Proposed Decision, at 137, emphasis added.

<sup>45</sup> Beyond the Constitutional authority, the California Legislature has reaffirmed its policy as stated in Public Utilities Code Section 276.5(a) and Section 709. “To promote lower prices, broader consumer choice, and avoidance of anticompetitive conduct.”

<sup>46</sup> Proposed Decision, at 137.

<sup>47</sup> Exh. 54 (Roycroft June), at 123-128.



which in turn means higher surcharges on all customer bills to support these programs. In the end, PPPs alone will be more costly and less likely to deliver on their stated objectives and can only stand alongside narrowly tailored regulatory response. Because so much is at stake, this Commission should engage stakeholders in a Phase II of this proceeding to determine the appropriate mix of regulatory responses to the identified market failures in both the voice and broadband markets.

## **VI. SERVICE QUALITY AS A MARKER FOR MARKET CONCENTRATION**

With a dismissive “wave of the hand” the Proposed Decision ignores significant record evidence of the link between poor service quality and market competition. TURN’s experts urged the Commission to consider inadequate service quality as part of its competition analysis precisely because the record here and in the Commission’s Service Quality docket demonstrate persistent failures by the carriers to meet service quality standards or to respond in a timely and comprehensive manner to service quality complaints. As Ms. Baldwin notes,

Rational consumers do not prefer to pay the same (or higher) price for basic service while receiving a degraded level of service. This was clearly demonstrated during the public comments in the eleven workshops and public participation hearings last summer held by the Commission to review the condition of the network that Frontier was seeking to purchase from Verizon. There, customers demanded a functioning dial tone, reliable emergency services, and robust service, and complained that the existence competitive forces (if any) were not yielding the levels of service quality that consumers prefer...Without competitive pressures to offer high quality services, it is precisely this market failure that necessitates oversight of service quality, especially in rural areas, and the ILECs’ record of uneven service quality therefore provides a barometer to market discipline.<sup>48</sup>

Without competitive pressures to offer high quality services, it is precisely this market failure that necessitates oversight of service quality, especially in rural areas, and the ILECs’ record of uneven service quality therefore provides a barometer to market discipline.<sup>49</sup>

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<sup>48</sup> Exh. 56 (Baldwin July), at 21-22.

<sup>49</sup> Exh. 56 (Baldwin July), at 31-32.

Moreover, Ms. Baldwin notes that it is often economically efficient to allow service quality to decline in areas with limited competition and high costs. The Commission should use this data and economic analysis as a red flag in looking at the impact of market failure on California consumers.

While TURN does not disagree with the Proposed Decision's sweeping statement that a robustly competitive market might not always deliver adequate service quality,<sup>50</sup> that is not the argument. Instead, the question that the Commission should be asking is whether known and persistent problems with service quality and network deterioration is a barometer or canary in a coal mine for market failure and limited competitive choice. Despite evidence that in this case it is relevant to the Commission's analysis, the Proposed Decision fails to make findings or conclusions on this matter.

TURN continues to encourage the Commission to evaluate service quality as part of its assessment of competition, and to also address service quality issues that affect the essential services that California consumers depend.

## **VII. RECORD EVIDENCE OF SUPPLY AND DEMAND ELASTICITIES**

The Proposed Decision discusses the Commission's inability to determine the "cross-price elasticity of demand" and speculates that a more refined analysis might help the Commission determine "how are different customer segments making different purchasing choices in response to service offerings and pricing?"<sup>51</sup> This statement ignores TURN's testimony regarding the impact of high wireline broadband prices on low-income consumers'

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<sup>50</sup> Proposed Decision, at 110. TURN notes that the Proposed Decision's reference to the automobile industry is apt in so far as it demonstrates a need for continuing oversight and regulation of certain products and services where consumers do not have sufficient information to make informed decisions or have unequal bargaining power. Just as the federal government has seen need to regulate auto safety, TURN notes that it recently filed an Application for Rehearing on the Commission's Final Decision in R.11-12-001, urging additional consumer protections for service quality of telecommunications services in California

<sup>51</sup> Proposed Decision, at 115.

purchases of broadband.<sup>52</sup> Data from both the California Field Poll and Pew Internet show that lower income consumers are more likely to rely only on the more expensive and less functional wireless broadband, and that the “high cost of home broadband” is the major impediment in subscription.<sup>53</sup>

The Proposed Decision also states that the record in this proceeding “offers little insight into the elasticity of the supply of telecommunications services.”<sup>54</sup> TURN suggests that the record supplies ample evidence regarding supply responses. Indeed, the Proposed Decision relies on this evidence elsewhere to conclude, for example, that market exit has been the supply response in the traditional CLEC sector.<sup>55</sup> As for the legacy telephone companies, TURN’s Roycroft describes how anemic resale and UNE-unbundling have become in the residential market:

Legacy Frontier and Consolidated do not provision any residential wholesale lines. Frontier indicates that it does not have historical data regarding Verizon wholesale activities. AT&T describes a level of residential wholesale sales that can only be described as *de minimis*.<sup>56</sup>

Similarly, the evidence of increasing concentration over time discussed above is also consistent with market exit and consolidation in facilities based wireless operations.<sup>57</sup> With regard to wireline broadband markets, it is clear from data presented in the Proposed Decision that ILECs have been unwilling to enter the market for high-quality broadband (i.e., at speeds in

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<sup>52</sup> Exh. 54 (Roycroft June), at 74-75.

<sup>53</sup> Exh. 54 (Roycroft June), at 75.

<sup>54</sup> Proposed Decision, at 115.

<sup>55</sup> Proposed Decision, at 57.

<sup>56</sup> Proposed Decision, at 95.

<sup>57</sup> Proposed Decision, at 68.

excess of the FCC's 25/3 Mbps standard). This has resulted in monopoly conditions for most California households.<sup>58</sup>

In summary, with regard to matters of “cross-price elasticity of demand” and “elasticity of supply,” the Commission must not lose sight of the forest of market failure due to its inability to accurately measure one of the trees. There is no question that the evidence considered and presented in the Proposed Decision clearly shows market failure, regardless of specific supply or demand elasticities.

### **VIII. 5G WIRELESS SPECULATION SHOULD NOT BE BASIS FOR CONCLUSIONS**

The Proposed Decision points to 5G wireless as being a potential disruptive technology that could impact competition in wireline (and wireless) broadband markets. “Likewise, we recognize that forthcoming mobile technologies, like 5G service, may offer faster speeds and higher data caps that render mobile a closer substitute for home broadband.”<sup>59</sup> In addition to the fact that the availability of 5G services is certainly not “date certain” at this point,<sup>60</sup> there are a number of factors that have the potential to moderate the potential impact of 5G on California broadband markets. First, 5G services will be provided by AT&T. As discussed above, as an integrated provider of wireless and wireline services, AT&T will continue to have strong incentives to increase broadband rates in a manner that is most profitable to an integrated provider, as demonstrated by its willingness to raise wireline rates in the face of increased wireless subscription.<sup>61</sup> AT&T will be in a similar position with regard to 5G and wireline broadband.

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<sup>58</sup> Proposed Decision, at 83.

<sup>59</sup> Proposed Decision, at 47.

<sup>60</sup> “AT&T’s Vision of Ultrafast Wireless Technology May Be a Mirage,” *New York Times*, October 26, 2016. [http://www.nytimes.com/2016/10/27/technology/atts-vision-of-ultrafast-wireless-technology-may-be-a-mirage.html?\\_r=0](http://www.nytimes.com/2016/10/27/technology/atts-vision-of-ultrafast-wireless-technology-may-be-a-mirage.html?_r=0)

<sup>61</sup> See, Exh. 54 (Roycroft June), 128-129.

In addition, competition in 5G markets will depend even more so on backhaul networks, as the very high frequencies associated with 5G will require small cell sites.<sup>62</sup> Small cell sites need extensive fiber-based backhaul, and carriers like T-Mobile and Sprint face a decided disadvantage as compared to their ILEC-affiliated rivals on this count. The record also demonstrates that 5G competition may be hindered by backhaul bottlenecks.

In expert testimony, TURN urged the Commission not to use predictive judgments or speculation that market entry is “just around the corner” to find the existence of actual competition.<sup>63</sup> The Proposed Decision’s reliance on the “potential” for 5G technology to enhance competition harkens back to the Commission’s reliance on the “potential” for residential UNE competition in the URF I decision.<sup>64</sup> A decade later, the record reflects the failure of the UNE model in residential markets. TURN urges the Commission not to make the same mistake and rely on a promised yet speculative technology that may or may not benefit all California consumers.<sup>65</sup>

## **IX. AT&T’S INVESTMENT FAILURE AT THE CORE OF ANALYSIS**

While the Proposed Decision holds high hopes for 5G technology, it overlooks the substantial evidence presented by TURN of one of the underlying causes why California consumers are facing extremely high concentration for high quality broadband, (with over 65% of households experiencing monopoly). The abandonment of broadband by ILECs elicits no more than a passing mention in the Proposed Decision:

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<sup>62</sup> “5G could require cell towers on every street corner,” *CIO*, September 8, 2016. <http://www.cio.com/article/3117705/cellular-networks/5g-could-require-cell-towers-on-every-street-corner.html>

<sup>63</sup> See, Exh. 53 (Baldwin March) at p. 16 (warning against relying on potential competition and discussing an FCC Order expressing regret, five years later, on its reliance on potential competition in granting a Qwest forbearance request.)

<sup>64</sup> See, Proposed Decision, 123; See also, D.06-08-030 (URF I) at p. 142, FOF 51, 77 (“We find that FCC-mandated unbundling policies; the required provision of stand-alone DSL service by Verizon and AT&T; and substantial cross platform competition sufficiently restrain incumbents’ pricing power.”)

<sup>65</sup> Proposed Decision, at 130-131.

Indeed, there is some reason to question whether the traditional telephone utilities are leaving the high-speed, residential broadband market to the cable companies. Verizon first halted the development of its fiber (FIOS) plant, and then sold its entire California local wireline network to Frontier. We also observe the increasing market share of the cable carriers.<sup>66</sup>

Dr. Roycroft presented extensive evidence that indicates that AT&T has failed to invest in a manner that is consistent with both state and federal statutory objectives. Specifically, Dr. Roycroft provided detailed maps showing AT&T broadband deployment patterns, and demonstrated that in 86% of the Census Blocks in which AT&T serves, AT&T continues to deploy slow DSL technologies with download speeds of 18 Mbps or less.<sup>67</sup>

By its recent actions, it is abundantly clear that AT&T is willing to channel its resources into the acquisition of alternative video delivery platforms like DirecTV, or to propose to acquire content companies like Time Warner. These acquisitions do nothing to improve market conditions in California broadband markets and arguably make it more difficult for competitive carriers using alternative technologies to enter the market. The Commission should acknowledge, and make plans to address, the root of the problem associated with broadband market failure.

#### **X. WHOLESALE MARKETS DEMAND FURTHER ACTION BY COMMISSION**

The Proposed Decision properly analyzes the role of wholesale markets in the development of effective competition.<sup>68</sup> The Proposed Decision agrees with TURN's witness Ms. Baldwin "that the provision of backhaul service is highly concentrated at a statewide level, and may be more highly concentrated within some regions."<sup>69</sup> However, the recommendations adopted by the Proposed Decision are deficient.

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<sup>66</sup> Proposed Decision, at 129.

<sup>67</sup> Exh. 54 (Roycroft June), at 100-101.

<sup>68</sup> See, for example, Proposed Decision at 13-14, 19, 31-32.

<sup>69</sup> Proposed Decision, at 32.

For example, even though the Proposed Decision finds that the special access market is highly concentrated and that this concentration can impact competition, it fails to adopt any of the proposed remedies included in parties' testimony.<sup>70</sup> This error could be remedied at least in part by committing the Commission to participate in the FCC proceedings that affect the rates, terms, and conditions of special access (BDS) services upon which California telecommunications markets so critically depend.

Furthermore, while the Proposed Decision acknowledges the importance of monitoring markets, its directives regarding monitoring are too vague in light of the concrete findings of market failure even in the wholesale markets. The record does not support the conclusion that monitoring is an effective substitute for regulation in the face of clear and persistent market failure. The Proposed Decision further exacerbates that error by adopting an inadequate monitoring scheme and ignoring the evidence that demonstrates the need for detailed monitoring with specific criteria as proposed by Ms. Baldwin and others.<sup>71</sup>

## **XI. PROPOSED DECISION DOES NOT PROVIDE AN ADEQUATE RATIONALE FOR ITS "DO NOTHING" APPROACH**

TURN and ORA urged the Commission to revisit rate regulation and price caps for basic telephone service to protect California consumers.<sup>72</sup> In response, the Proposed Decision states,

Indeed, an effort to regulate rates for telephone service, given the market transitions described in this decision, *might create unintended consequence that would harm consumers*. We are not certain that rate-regulating telephone services *would result in just and reasonable rates*.<sup>73</sup>

Just what these unintended consequences might be are not revealed in the Proposed Decision, but TURN has a difficult time envisioning an ensuing catastrophe from placing a cap

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<sup>70</sup> See, Exh. 55 (Baldwin June 1), at 45-47; Exh 78 (Sprint, June 1), at 10-12, 15-17.

<sup>71</sup> See, Exh. 53 (Baldwin March 15), at 24-26; Exh. 55 (Baldwin June 1), at 46-48.

<sup>72</sup> See, Exh. 54 (Roycroft June 1), at p. 138-141; Exh 16 (ORA June 1) at p. 118-119.

<sup>73</sup> Proposed Decision, at 122, emphasis added.

on the ILECs' ability to raise basic service rates. The Proposed Decision also indicates "we find that the price of stand-alone voice – while central to the URF decisions – is not centrally relevant to a market in which voice is most often bundled with broadband."<sup>74</sup> Certainly, the price of stand-alone voice *is central to those consumers who do not have the ability to switch to bundles or wireless-only service*. Indeed, TURN documented that the price of stand alone voice is directly relevant to the pricing of bundles because as firms move to increase profitability, in some cases, they will set rates for stand alone services to drive consumers to purchase bundles.<sup>75</sup> Those consumers who do not want (or cannot afford) bundles then pay the higher prices and create another source of profit for the carrier. The price increases implemented by AT&T and Verizon reflect the price discrimination strategy described by Dr. Roycroft:

For those customers who cannot easily substitute to bundles or wireless, the higher basic rate is the only option. Thus, discrimination that extracts higher prices for basic service from those who cannot easily switch does not require the level of information that Mr. Gillan suggests. *Uniform, statewide basic voice prices, set to the levels that have been established by ILECs, especially AT&T and Verizon, effectively discriminate, harming the consumers who have the least ability to substitute.*<sup>76</sup>

On the matter of regulating basic rates, the Proposed Decision also states:

An attempt to rate regulate telephone service would likely have unintended consequences that *would render rates less just and reasonable than they are in the absence of rate regulation.*<sup>77</sup>

The Proposed Decision does not support this conclusion with evidence from the record. Although basic service rates have become a relatively small part of the overall telecommunications market, the Proposed Decision recognizes that consumers continue to rely on this service, and those who do are likely to have no choice due to the lack of investment

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<sup>74</sup> Proposed Decision, at 123.

<sup>75</sup> Exh. 56 (Baldwin July) at 9-11, 22-23.

<sup>76</sup> Exh. 57 (Roycroft July), at 33, emphasis added.

<sup>77</sup> Proposed Decision, at 160, emphasis added.



associated with telecommunications providers, or to have special needs for the service.<sup>78</sup> TURN also presented evidence, not addressed in the Proposed Decision, that the age demographic continues to be a factor in the utilization of wireline voice services, and that these older households may not find wireless-only service to be an acceptable option due to the lack of reliability of wireless 911 services.<sup>79</sup>

The Proposed Decision offers no justification for its theory that rate regulation of basic service rates would generate unintended consequences that would make rates “less just and reasonable.” Given the overwhelming evidence of high levels of market concentration and high prices in important markets like broadband, which the Proposed Decision acknowledges are linked to voice markets, and the Proposed Decision’s recognition that segments of the voice service market still have little or no choice of an acceptable alternative, modest regulatory action, such as the price cap proposed by TURN, would provide benefits that would exceed potential and unspecified risks. The record confirms that constraining basic service rates would generate an *intended* consequence of protecting the most vulnerable customers and provide some assurance that basic rates will not move further from just and reasonable levels. The Commission’s detailed examination of telecommunications markets, along with the carriers’ testimony, did not identify any economically-sound reason why basic service rates have increased, other than the existence of market power, and the discriminatory practices of ILECs. There is no question that for basic voice service, it is this Commission’s responsibility to manage market power, and prevent undue discrimination.

## **XII. THE PROPOSED DECISION HAS NO FINDINGS RE TURN AND ORA’S APPLICATION FOR REHEARING**

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<sup>78</sup> Proposed Decision, at 3, 39-40, 156.

<sup>79</sup> Exh. 54 (Roycroft June), at 34-35, 131.

The Proposed Decision neglects to include any findings related to TURN's and ORA's Application for Rehearing. In D.15-11-023, the Commission granted TURN and ORA a limited rehearing of D.08-09-042 to develop an adequate record and make findings based on the record.”<sup>80</sup> The Commission ordered that this rehearing be considered within the OII in the instant proceeding because, “these issues raised by rehearing applicants are grounded, directly or indirectly in the assumption in D.08-09-042 that a competitive market would exist after the expiration of rate caps and would produce reasonable and/or affordable rates.”<sup>81</sup> The OII confirms the Commission's intent,

In considering the data and comments, we will concomitantly resolve the limited rehearing of D.08-09-042 (*URF II*), consistent with our Order Granting Limited Rehearing adopted concurrently today (D.15-11-023) (hereinafter Rehearing Order), which raises issues related to the state of competition and affordability of telecommunications service in California.<sup>82</sup>

The rehearing requires the Commission to address specific, yet critical, issues regarding its regulatory framework including whether there was inadequate economic analysis of the impact of deregulation on basic service rates and LifeLine as well as inadequate analysis of the changes in rate cap calculations for high cost areas. Yet, aside from some minor discussion of the fact that a rehearing would take place in the context of the OII the Proposed Decision presents no findings specifically on the rehearing issues. In fact, the issue of affordability, which the Commission specifically identified as one to be considered in the OII was inexplicably shunted off to the LifeLine proceeding,<sup>83</sup> as if the only California consumers who face affordability issues are those eligible for LifeLine service.

### **XIII. THE COMMISSION SHOULD OPEN A SECOND PHASE FOR NEXT STEPS**

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<sup>80</sup> D.15-11-023, at 12.

<sup>81</sup> See, D.15-11-023, p. 12; and *OII* at 7.

<sup>82</sup> *OII*, at 2.

<sup>83</sup> *OII*, Ordering Para 2 at 21, “The question of the ‘affordability’ of telecommunications services in California will be considered in the Lifeline proceeding (R.11-03-013).”

Ten years ago, the Commission found “an ongoing need and statutory mandate for vigilant Commission oversight of the competitive marketplace to ensure that the market serves consumers well.”<sup>84</sup> TURN submits that taking ten years to reassess the status of competition hardly reflects “vigilance” in this fast moving marketplace, especially in the face of numerous requests by stakeholders to uphold statutory mandates and investigate the impact on consumers and California telecommunications markets.<sup>85</sup> Now that the Commission has engaged in investigating the competitiveness of California telecommunications markets and found significant market failures as a result, it is beyond credulity that the Commission would close this proceeding without taking action other than three years of data collection, to remedy the problems it has found.

TURN submits that the more reasonable approach would be to keep the proceeding open and create a second phase to consider and adopt solid protections for consumers in these highly concentrated markets, including possible price caps for basic service and other revisions to Commission rules to ensure California consumers, including but not limited to the most vulnerable consumers, have access to affordable, high quality telecommunications services. Earlier in the proceeding, several carriers filed motions to suspend the schedule and hold workshops as a “more efficient method” for the Commission to identify necessary information and the scope of its investigation.<sup>86</sup> TURN opposed those proposals, and others that followed, as

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<sup>84</sup> OII citing D.06-08-030, Slip Op. at 156 (“we will remain vigilant in monitoring the voice communications marketplace”).

<sup>85</sup> See, discussion in the OII at p. 5-7 regarding the procedural history and background of TURN’s and ORA’s requests to revisit the URF findings, including ORA’s 2008 and 2010 Petitions for Modification. See also, C.13-12-005 (*TURN v. AT&T*) alleging AT&T’s basic service rates were not just and reasonable.

<sup>86</sup> *AT&T et al. Motion to Suspend the Preliminary Schedule Until the Commission Conducts Workshops and an En Banc Hearing to Focus the Proceeding*, December 9, 2015; CellCo Partnership (Verizon Wireless), *Motion to Remove Verizon Wireless As Respondent and, In the Alternative, to Suspend the Preliminary Schedule*, December 15, p. 7; CTIA, *Motion for Expedited Ruling on Modifications of Procedural Schedule*, December 18, p. 5-6.

premature, urging the Commission to continue its data gathering, investigation and analysis of the market. TURN suggests that now is the time to resurrect the carriers' proposals and schedule a second phase of the proceeding with a workshop process to discuss responses and remedies to the problems identified in the Commission's decisions in this docket. If the Commission closes this proceeding with only meager directives out to 2019 that staff should monitor the marketplace, it could be many more years before another proceeding is opened to address rates for basic service that are not just and reasonable, broadband markets that are still not competitive, and consumers that are consistently being harmed.

#### **XIV. CONCLUSION**

TURN urges the Commission to make the changes to this Proposed Decision as discussed above and to keep the docket open to conduct a Phase 2 and address these critical market failures.

Dated: November 7, 2016

Respectfully submitted,

/S/

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## RECOMMENDED REVISIONS

### Findings of Fact

2. Although many California households still rely on voice communications, vVoice communication itself is a diminishing segment of the broader telecommunications market.

4. The Commission's Communications Division has prepared Market Share Analyses that show concentration throughout various communications markets in California, but that none of these markets is a monopoly. Further, it finds that competition in intermodal voice services (traditional voice, wireless and VoIP telephony taken together) has increased since 2001, predominantly due to competition of mobile and cable VoIP. However, the Report does not reasonably reflect the impact of the integrated provider on market share nor does it appropriate analyze intermodal technology.

[Insert between FOF 6 and 7]

X. Due to concerns over the confidentiality of carrier data and an injunction from the Federal District Court, not all parties to the proceeding had the ability to analyze carrier data that we rely upon here.

7. Taken together, this data tells us:

a. Most residential wireline customers with voice service obtain that service from either the legacy incumbent telephone provider or cable VoIP providers;

b. Concentration in the wireless market has increased since 2001;

c. For ~~most~~ many consumers households, wireline and wireless voice services are substitutes. Stated differently, mobile voice service is a substitute for fixed landline voice service for ~~most~~many Californians, subject to limitations including coverage gaps, the special needs of customers with disabilities or medical devices that are not necessarily served by mobile service, and weak indoor wireless signals;

d. Evidence suggests that this is one-way substitutability.

Landline voice service is typically not a substitute for mobile voice service due to its lack of mobility;

e. Competition in this retail intermodal voice market, as measured above, appears strong for some geographic, demographic and product markets in the state;

f. Whether landline and mobile services are substitutes for business

customers is less clear;

g. For most consumers, residential and mobile broadband services are not substitutes for each other. Mobile data service, at present, is typically not a substitute for residential broadband service because of higher data usage prices for mobile and lower data caps for mobile compared with residential broadband; and

~~h. Our analysis of the substitutability of broadband services could change if either 5G wireless becomes a closer substitute for residential broadband, or if residential broadband services improve their mobility through new functionality or other innovation.~~

9. To examine telecommunications competition in California, we must also examine the services available in different parts of the State, and the service subscriptions in different parts of the State, as well as different demographic markets.

12. It is unclear whether the growth of wireless, VoIP, and other alternative means of voice communication has kept prices and services for traditional landline service just and reasonable, ~~or even whether that is the right question to ask when most consumers obtain voice service in a bundle with broadband and other services.~~

14. The voice market is tied to the broadband market in a number of ways, including: (1) broadband is the network means of transmitting VoIP, one of the intermodal competitors foreseen by URF I; (2) with the high incidence of service bundling, and the increased importance of broadband Internet access, consumer choices in the voice market may be affected by their choices in the broadband market including attempts by carriers to increase rates for stand-alone voice service to encourage customers to subscribe to bundled services; and (3) traditional phone calls and broadband data services utilize the same physical network.

~~23. The price of stand-alone voice service — while central at the time of the URF decisions — is not centrally relevant to today's market. An attempt to rate regulate telephone service would likely have unintended consequences that would render rates less just and reasonable than they are in the absence of rate regulation.~~

27. There is a considerable risk of inefficiency in the market for cell site backhaul, which may impact the rates for retail mobile and broadband services.

[Add FOF]

X. Staff must monitor the developments in the marketplace, including wholesale and residential, through a transparent and open process including periodic public reports and through the use of concrete and specific monitoring criteria that can be developed through a Phase 2 of this proceeding.

## Conclusions of Law

Insert as 1.

X. Public Utilities Code §451 and §453 place a statutory obligation on the Commission to ensure that rates are just and reasonable and non discriminatory.

3. Public Utilities Code § 709.5 endorses a reliance on competitive markets to achieve California's goals for telecommunications policy while directing us to take steps to ensure competition is fair and the state's universal service policy is observed.

5. Data collected for forbearance petitions under Public Utilities Code § 716 can provide useful guidance to the Commission in its oversight of the California communications marketplace. The period after a forbearance petition is filed may not be sufficient time to gather and analyze that information, and thus we direct Communications Division to collect that data on an ongoing basis. If the Commission finds the reported data useful and relevant it will ensure all stakeholders have access to the data, subject to the requirements of state and federal law, if it decides to rely on or use the data in any way.

13. Telecommunications affordability will be addressed in the Lifeline proceeding, as well as in a Phase 2 of this proceeding and by our other public purpose programs.

14. Clearly confidential carrier information, such as granular, census block level data, and the identity of certain wholesale providers are not, being publicly disclosed in this Decision nor did all parties to this proceeding have access to specific types of granular carrier subscription data relied upon in this Proposed Decision.

## ORDERING PARAGRAPHS

3. The Communications Division staff shall prepare and deliver by ~~December 1~~January 31, 2019 a report to the Commission analyzing voice and broadband in the following manner: broadband availability by speed and geography; the number of broadband service providers by geographic area; broadband penetration rates by geographic area; areas of the state having a single and no broadband provider, and voice and broadband market share by various geographic areas in California. Reports shall be made available to all stakeholders subject to protections of confidentiality of carrier data.

5. ~~Investigation 15-11-007 is closed.~~ This docket shall remain open to conduct a Phase 2 for further consideration of additional investigation, monitoring, reporting, and revisions to Commission regulation to address issues and questions discussed in this Decision. Communications Division shall hold the first workshop within 90 days of the effective date of this order.