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Federal Communications Commission  
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October 4, 2004

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**Via Hand Delivery**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
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Washington, DC 20554

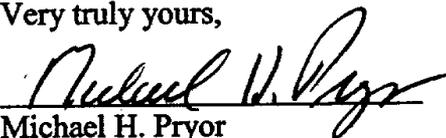
Re: *Unbundled Access to Network Elements; Review of the Section 251  
Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No.  
04-313, CC Docket No. 01-338

Dear Ms. Dortch:

Please find attached two copies of the Initial Comments of NuVox, Inc. ("NuVox"), submitted in redacted form, in the above-referenced matter. The confidential version of these comments is being submitted via hand delivery under a separate cover pursuant to the Commission's August 20, 2004 order in the above-referenced matter.

Please date stamp the enclosed return copy and return it in the envelope provided. If you have any questions relating to this filing, please contact the undersigned.

Very truly yours,

  
Michael H. Pryor  
Counsel to NuVox, Inc.

Enclosures

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Federal Communications Commission

October 4, 2004

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

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In the Matter of )	
Unbundled Access to Network Elements )	WC Docket No. 04-313
Review of the Section 251 Unbundling )	
Obligations of Incumbent Local Exchange )	CC Docket No. 01-338
Carriers )	
_____ )	

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October 4, 2004

Summary

NuVox, Inc. (“NuVox”) focuses its initial comments on DS1 last-mile facilities. In particular, it addresses impairment in relation to DS1 local loops and DS1 transport when combined with DS1 local loops to create a DS1 enhanced extended loop or EEL. These facilities are used to provide competitive voice and broadband services to small and medium-sized business customers. This market segment has been one in which smaller, facilities-based carriers have been able to enter and compete against the incumbent carriers, and it is one in which there are few, if any, intermodal alternatives. Entry into this market segment has only occurred, and can only be sustained, through access to these last-mile facilities at cost-based rates. Facilities-based carriers have been and continue to be impaired without such access.

The issue of impairment turns on three considerations. The first assesses whether carriers economically can self-deploy DS1 loops or transport given the significant entry barriers the Commission identified in the *TRO*<sup>1/</sup> and in light of the limited revenue opportunity available from the use of DS1 facilities. The second assesses whether DS1 wholesale alternatives are reasonably available at the DS1 capacity level from non-incumbent LEC sources such that elimination of UNE access would not result in impairment. Finally, as a result of the *USTA II* decision, the Commission must assess whether ILEC special access facilities are relevant to impairment.

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<sup>1/</sup> *In the Matter of Review of the Section 251 Unbundling Obligations for Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 18 FCC Rcd. 16978 (2003) (“Triennial Review Order” or “TRO”), *aff’d in part, rev’d in part, United States Telecom Assoc. v. FCC*, 359 F. 3d 554 (D.C. Cir. 2004) (“USTA IP”).

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With respect to the first two considerations, the record in the *TRO* demonstrated overwhelmingly that carriers were in fact impaired without access to DS1 capacity network elements. NuVox fully expects that a national finding of impairment for DS1 loops and EELs again will be justified, and will be sustainable under *USTA II*, on the record developed in this proceeding. Carriers cannot economically self-deploy DS1 loops or EELs and wholesale alternatives are exceedingly rare.

The availability of special access services does not alter the impairment finding. NuVox has entered the local market to serve small and medium-sized businesses through the use of UNEs, not special access services. NuVox could not afford to provide service if forced to use tariffed special access services because special access rates are substantially higher than cost-based TELRIC rates, even when discounted. Requiring carriers to use special access services undermines the goal of facilities-based competition because ILEC tariff structures force carriers to stay on the ILECs' network, eliminating demand for wholesale transport providers and hampering the ability to self-provision. Special access services also raise the administrability concerns that *USTA II* identified as justifying the exclusion of such services from the impairment inquiry.

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Carriers )	
_____ )	

**COMMENTS OF NUVOX, INC.**

NuVox, Inc. (“NuVox”), by and through its counsel, submits these comments in response to the Notice Proposed Rulemaking released on August 20, 2004 in the above-captioned proceeding.<sup>2/</sup>

**I. INTRODUCTION TO NUVOX AND NUVOX SERVICES AND MARKETS**

NuVox is a privately held, facilities-based provider of integrated voice, data and broadband services to small and medium-sized businesses in the southeast and midwest. Jake E. Jennings Declaration, ¶¶ 3-4 (Oct. 1, 2004) (“Jennings Decl.”), attached hereto as Exhibit A. NuVox offers to these customers local voice and data services, domestic and international long distance services, dedicated high speed internet access services, unified voice, e-mail and fax messaging and other advanced services, including local and wide

<sup>2/</sup> *Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313, CC Docket No. 01-338, *Order and Notice of Proposed Rulemaking*, FCC 04-179 (rel. Aug. 20, 2004) (“*Interim Order and NPRM*”).

area network management, virtual private networks, and web-based business applications. Jennings Decl. ¶ 4.

NuVox recently concluded a merger of equals between NewSouth Communications and NuVox Communications. Jennings Decl. n.1. The combined company provides service to approximately 38,000 customers in sixteen states, and 48 markets, ranging from major urban areas such as Atlanta to small cities such as Hickory, North Carolina. Jennings Decl. ¶ 3. The company has invested more than \$500 million in network facilities consisting of 28 Class 5 voice switches, 13 core data sites with GSR-class routers, over 400 ATM data nodes, a Sonus soft-switch VOIP platform, multiplexing and transport related equipment deployed in more than 280 collocation arrangements, network operations and back office systems, and customer premises equipment that enables small businesses to obtain integrated services over the DS1 facility. Keith Coker Declaration ¶ 2 (Oct. 1, 2004) ("Coker Decl."), attached hereto as Exhibit B.

NuVox has undertaken a "smart build" approach. Coker Decl. ¶ 2. It has made substantial investments in technology and equipment, but has not sought to duplicate the ILECs' ubiquitous local loop and transport networks. Coker Decl. ¶ 2. Instead, NuVox leases transmission elements from the incumbent carrier for last-mile access, and, where available, uses third-party providers outside of the last mile, primarily interLATA transport to link its widely dispersed switches, and to connect those switches to long haul voice and data carriers and internet access points. Coker Decl. ¶ 3. To a lesser extent,

where available, NuVox utilizes third-party providers for backhaul from collocation arrangements to NuVox switches. (Backhaul is more often provided by the incumbent over SONET rings, typically as tariffed special access services). Coker Decl. ¶ 3. All of this third-party transport is provided either at the OC-3 level or higher, or, in some instances, at multiple DS3 capacity levels. Coker Decl. ¶ 3. NuVox has not deployed any of its own fiber. Coker Decl. ¶ 2.

NuVox targets small and medium-sized business customers that can be served with one or more DS1 local loops. Jennings Decl. ¶ 4. More than 18,000 of NuVox's customers purchase 12 or fewer lines over a single DS1 loop. Jennings Decl. ¶ 4. NuVox's small business customers spend, on average, approximately \$500.00 to \$700.00 per month for NuVox's services, including revenue from ancillary services such as broadband Internet access and data services. Jennings Decl. ¶ 4. Examples of the types of businesses served by NuVox include the health care industry, insurance and real estate agents, car dealerships, small law firms and the hospitality industry. Jennings Decl. ¶ 4.

NuVox offers small businesses a true competitive choice and provides innovative new services. More than 90 percent of the small business customers that switch from the local incumbent provider are upgraded to broadband services. Jennings Decl. ¶ 4. Through its investment in technology, NuVox provides not only integrated voice and data services over a single DS1 facility, but also continues to develop and deploy new and innovative features such as dynamic bandwidth services and enterprise VOIP services such as click-to-talk and unified messaging. Jennings Decl. ¶ 4.

Significant private investment has been made in facilities-based CLECs such as NuVox based on the promise of competition embodied in the 1996 Act and the consistent support for facilities-based competitive entry voiced by the Commission. This was emphasized in recent submissions by investors in companies like NuVox.<sup>3/</sup> These private equity firms have invested in competitive carriers with a clear understanding of the risks associated with industries characterized by high fixed costs, and network and scale economies. They understood as well the risk unique to this industry – the need to rely on their chief competitors, the ILECs, for necessary inputs. This risk was made manageable through gradual deployment of alternative facilities coupled with a strong and continuing commitment on the part of the government to facilities-based competition.<sup>4/</sup>

Chairman Powell recently reiterated this commitment in his separate statement to the Commission's interim rules:

I also have consistently supported intramodel competitors that are facilities-based. Carriers like Covad, NuVox, McLeod and XO have been important contributors to competition. In the *Triennial Review Order*, I supported fully requiring incumbents to unbundle DS1 loops and transport, as did every one of my colleagues. I remain steadfastly committed to providing the key network elements to these facilities competitors in this proceeding, without which they would be impaired. Indeed, I am quite confident that we will be able to provide

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<sup>3/</sup> See, e.g., Letter from Peter H.O. Claudy, M/C Venture Partners, James Flemming, Columbia Capital, James N. Perry, Jr., Madison Dearborn Partners, LLC, Rand G. Lewis, Centennial Ventures and James H. Greene, Jr., Kohlberg Kravis Roberts & Co., to Michael K. Powell, Chairman of the FCC, CC Docket Nos. 01-338, 96-98, and 98-147 (July 22, 2004) ("July 22<sup>nd</sup> Investor Letter"); Letter from William Laverack, Jr., Whitney & Co., LLC, Michael Huber, Quadrangle Group, LLC, Anthony J. Bolland, Boston Ventures, to Michael K. Powell, Chairman of the FCC, filed in CC Docket Nos., 01-338, 96-98, 98-147 (July 28, 2004).

<sup>4/</sup> July 22<sup>nd</sup> Investor Letter at 1-2.

these elements, once we have a full and complete record, consistent with the guidance of the court.<sup>51</sup>

As demonstrated herein, the Chairman's confidence is well placed because the evidence of impairment without access to DS1 loops and EELs is overwhelming. Indeed, without continuing access to DS1 facilities, the substantial investment made in companies like NuVox may well be jeopardized and the small business community which has begun to reap the benefits of competition will face less choice and higher prices.

**II. NATIONAL IMPAIRMENT FINDING FOR DS1 LOOPS AND EELS IS APPROPRIATE AND CONSISTENT WITH *USTA II***

The record supports the re-adoption of a national finding of impairment without unbundled access to DS1 loops and EELs fully consistent with the guidance provided by the *USTA II* Court.

**A. The *TRO's* Impairment Standard Is Fundamentally Sound**

The impairment standard adopted by the Commission is fundamentally sound. The standard of impairment generally seeks to determine whether there are barriers to entry that can be overcome given the revenue opportunity available from the services being offered over the facilities. *TRO* ¶ 84. The Commission identified a number of relevant entry barriers, such as scale economies, sunk costs and first mover advantages. *TRO* ¶¶ 85-91. The *USTA II* Court found that the Commission's standard "explicitly and plausibly connects factors to consider in the impairment inquiry," but also stated that its reasonableness can only be determined in its application. 359 F.3d at 571-72. The

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<sup>51</sup> *Interim Order and NPRM*, Statement of Chairman Michael K. Powell.

standard also considers the extent of intermodal alternatives, *TRO* ¶¶ 97-98, as directed by the Court. 359 F.3d at 572-73. As explained below, this standard, appropriately applied, demonstrates impairment without access to DS1 loops and EELs on a nationwide basis.

**B. *USTA II* Does Not Preclude National Impairment Findings for DS1 Loops and EELs**

The *USTA II* Court was clear that national impairment findings would be sustainable, “given the deference we would owe the Commission’s predictive judgment and the inevitability of *some* over-and under-inclusiveness in the Commission’s unbundling rules.” 359 F.3d at 570 (emphasis in original). What the Commission may not do, however, is adopt “very broad national categories where there is evidence that markets *vary decisively* (by reference to its impairment criteria), at least not without exploring the possibility of more nuanced alternatives and reasonably rejecting them.” 359 F.3d at 570 (emphasis added). Thus, in assessing impairment, the *USTA II* Court tasked the Commission with “tracking relevant market characteristics and capturing significant variation.” 359 F.3d at 563. In the absence of evidence that markets “vary decisively,” a national finding of impairment is reasonable. 359 F.3d at 570. The Court cited as a possible example of where a broad national finding may not be appropriate without exploring more nuanced alternatives a situation where there is evidence that the element has been “significantly deployed on a competitive basis.” 359 F.3d at 574.

A national finding of impairment for DS1 loops and EELs is fully consistent with the framework suggested by the Court. The relevant market characteristics and

significant market variation for loops and transport are largely, if not fully, captured by differentiating between capacity levels, as the Commission recognized in the *TRO*. The Commission correctly recognized that there are important distinctions in terms of impairment criteria between very high capacity facilities, those operating at the Optical Carrier (“OC”) level, and lower capacity levels operating at the electrical level (DS1 and DS3). *See, e.g., TRO* ¶¶ 202, 298, 380. Even between DS1 and DS3 level facilities the Commission recognized some distinctions, finding for example, that it is never economically viable to self-deploy at the DS1 level whereas self-deployment above two DS3’s for loops and 12 DS3’s for transport is presumptively feasible. *See, e.g., TRO* ¶¶ 202, 324, 327, 388, 391.

The Commission’s findings were premised on the unassailable conclusion that, although the costs and other barriers to self-deployment do not change markedly with respect to capacity level, there is a substantial difference in the ability to overcome those barriers based on capacity levels because the capacity level dictates the revenue opportunity available to overcome entry barriers. *See, e.g., TRO* ¶¶ 303, 380. Virtually all of the relevant market variation for loops and transport is captured by differentiating between capacity levels. Moreover, by setting caps on UNE availability at two DS3s for loops and 12 DS3s for transport (NuVox believes the caps may be retained), the Commission drew a bright line, based on an extensive record and its predictive judgment, between when carriers may or may not be impaired without UNE access. *See, e.g., TRO* ¶ 388. Below the caps, carriers are impaired, above the caps they are not. NuVox

believes that the Commission could, consistent with *USTA II*, base its impairment tests on these existing caps and end there.

The Commission may believe, however, that it should again give explicit consideration to whether there may be significant variation within the DS1 capacity level to warrant a further level of scrutiny to ensure that competitors do not gain DS1 UNE access where they are not impaired because of the availability third-party wholesale DS1 providers. The Commission did not previously find evidence that DS1 loops or transport were “significantly deployed.” In fact, it found that opposite – that there was “scant evidence” of wholesale DS1 availability anywhere in the nation). *See, e.g., TRO* ¶ 325 (“scant evidence” of wholesale DS1 loops); *id.* ¶ 392 (DS1 transport in generally not available on a wholesale basis). As discussed more fully below, these findings have only been reinforced since the *TRO*. Evidence from the states demonstrates that wholesale DS1 availability is extremely minimal. This is consistent with NuVox’s experience in the market, which also is further discussed below.

The paucity of DS1 wholesale deployment supports a finding of impairment on a national level. The lack of DS1 availability except on a very few isolated routes negates the possibility of adopting any type of broad geographic test, such as an MSA-based test. Such a test would inevitably result in the elimination of DS1 UNE access on numerous routes or locations where carriers are impaired. The analysis discussed below at Section IV(E) provides empirical support for this conclusion as it demonstrates the lack of any

transport at many wire centers even in MSAs for which ILECs have been granted pricing flexibility but from which NuVox requires DS1 transport. *See also* Coker Decl. ¶ 6.

Nor is it necessary to undertake a route-by-route analysis in order to attempt to identify routes where DS1 transport is available on a wholesale basis. Given the evidence collected by the states and the experience of carriers in the market, such an endeavor would result in the identification of exceedingly few routes. Moreover, given the limited number of routes or locations, it would be difficult, if not impossible, to extract a set of economic characteristics from which the Commission could postulate other “similar” routes where deployment could be possible. The administrative burden associated with identifying the few routes nationwide where DS1 wholesale capacity might be available far outweighs any harm to ILECs or competition in having to provide DS1 UNE access on such routes. Nor is such an exercise required by *USTA II*, as the Court fully recognized the inevitability of some over- and under-inclusiveness in the Commission’s determinations. Finally, special problems arise in the context of EELs which are in reality single end-to-end circuits.

Below, NuVox provides further evidence to support the conclusion that a nationwide impairment finding for DS1 loops and EELs is appropriate given the characteristics associated with that capacity level.

**C. Characteristics of the Market in Which DS1 Capacity Is Used**

**1. Lack of Intermodal Alternatives in the Small Business Market**

*USTA II* reiterated that the Commission must consider the existence and extent of intermodal competition. 359 F.3d at 572-73. There is no meaningful intermodal competition in the small to medium-sized business market in which NuVox competes. Although in some regions cable has become an important facilities-based competitor for internet access services in the mass market comprised of residential and very small business customers, such as at-home businesses, cable is not a source of competitive supply for business customers that benefit from DS1 or higher capacity services.<sup>6/</sup> As the FCC has recognized, cable facilities do not pass business locations,<sup>7/</sup> and cable cannot provide the array of services available at the same level of quality and security as can be provided over DS1 facilities.

NuVox's sales representatives confirm that cable is not viewed as a potential source of competition for the small and medium-sized business customers NuVox and other facilities-based CLECs serve. Christopher Benyo Declaration, ¶ 3 (Oct. 1, 2004) ("Benyo Decl.") attached hereto as Exhibit C. Through their constant interaction in the marketplace, NuVox sale representatives have obtained a thorough understanding of the source and extent of competition. Benyo Decl., ¶¶ 1, 3 Existing and potential customers

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<sup>6/</sup> See generally, *Competition in Access Markets: Reality or Illusion*, Economics and Technology, Inc. (August 2004) ("ETI Report"), submitted as an attachment to the *ex parte* Letter from Colleen Boothby, Counsel for Ad Hoc Telecommunications Users Committee, to Marlene M. Dortch, WC Docket No.04-313 (Sept. 30, 2004).

<sup>7/</sup> *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, CC Docket 98-146, *Third Report*, FCC No. 02-33, 17 FCC Rcd 2844, ¶ 45 (2002).

rarely identify cable as a source of competition. Benyo Decl., ¶ 3. Those relatively few customers that mention cable are the smallest businesses, those requiring six or fewer channels and typically only three or four voice lines. *Id.* Competition in this market overwhelmingly comes from the incumbent carrier and other facilities-based CLECs. Thus maintaining intramodal competition is particularly important for this segment of the market.

**2. Self-Deployment of DS1 Loops Is Economically Infeasible**

As correctly explained in the *TRO*, DS1 capacity loops are used overwhelmingly by CLECs to provide service to small and medium-sized business customers.<sup>8/</sup> The capacity of a DS1 circuit limits its efficient use to this customer class. A DS1, by definition, provides up to 1.54 megabytes of bandwidth which can be channelized to provide up to 24 voice lines. This level of capacity imposes constraints on the revenue-generating opportunity available with DS1 loops. This was expressly recognized in the *TRO*, which noted the “much lower revenue opportunities” available from customers served with DS1 level loops than is available from “large enterprise customers” that can be served economically with multiple DS3s or OCn level loops.<sup>9/</sup>

NuVox’s experience bears this out. The average monthly revenue generated from NuVox’s customers served over DS1 capacity loops is approximately \$500.00 to

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<sup>8/</sup> See *TRO* ¶ 325, n.961.

<sup>9/</sup> As a customer’s volume grows, the customer may be served with multiple DS1s. At some point, however, efficient network operation would dictate serving the customer over one or more DS3s rather than multiple DS1s. At that point, the impairment analysis applicable to DS3 loops would apply.

\$700.00, including revenue from ancillary services such as broadband internet access and data services. Jennings Decl. ¶ 4. Approximately 18,000 of NuVox's small business customers purchase 12 or fewer voice lines over the DS1 facility. Jennings Decl. ¶ 4. NuVox's experience is consistent with other companies that similarly provide facilities-based service to small business customers using DS1 loops and EELs. Cbeyond, for example, recently submitted an *ex parte* presentation stating its average DS1 customer has nine employees and seven business lines and that 88 percent of Cbeyond's customers purchase a basic service package priced at about \$500.00.<sup>10/</sup>

The lower level of revenue, coupled with higher rates of churn typically experienced with this customer class,<sup>11/</sup> led the Commission to conclude that it is "economically infeasible for competitive LECs to deploy DS1 loops, which require the same significant sunk and fixed construction costs as higher capacity loops." TRO ¶¶ 325-26. Most significant for the Commission was the cost of constructing loops in relation to the ability of competitive carriers to recover these costs over time, which is directly related to the capacity of the circuit. TRO ¶ 306. Simply put, CLECs "do not have the ability to recover sunk costs in self-deploying DS1 loops." TRO ¶ 326.

Certainly there is no evidence that DS1 loops are "significantly deployed on a competitive basis." *USTA II*, 359 F.3d at 575. Indeed, there is no serious argument that carriers economically can self-deploy stand-alone DS1 loops at any location. This

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<sup>10/</sup> Letter from Patrick T. Donovan, Counsel for Cbeyond Communications, to Marlene Dortch, Secretary of the FCC, CC Docket 01-338 and WC No. 04-313, at 3 (Sept. 8, 2002).

<sup>11/</sup> TRO ¶ 325.

conclusion was sufficiently clear that the Commission did not even propose a self-provisioning trigger for DS1 loops in the *TRO*. *TRO* ¶ 327. NuVox does not self-deploy any DS1 loops. Coker Decl. ¶ 2.

### 3. Extremely Limited Wholesale DS1 Loops Access

The Commission found in the *TRO* “scant” evidence of alternatives for serving DS1 customers at the wholesale level. *TRO* ¶ 325. The Commission did recognize the possibility that carriers that have deployed fiber to buildings might have excess capacity that could be used to provide wholesale DS1 level service to carriers seeking to serve customers within that building and tasked state commissions to determine whether such alternatives in fact exist. *TRO* ¶ 327. The Commission, however, pointed to no evidence of such actual alternative wholesale availability. The evidence submitted in state proceedings confirmed that wholesale DS1 loop service is virtually nonexistent. A review of the evidence submitted in twelve states found only 36 buildings that met the *TRO*’s DS1 wholesale loop trigger.<sup>12/</sup>

The *USTA II* Court suggests that impairment determinations made on the basis of levels of deployment depends on a “sensible definition of the markets in which deployment is counted” and location specific market definitions must take into account deployment to similarly situated locations. 359 F.3d at 574-75. The paucity of actual DS1 loop wholesale loop availability, however, makes it difficult, if not impossible, to

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<sup>12/</sup> See *Analysis of State Specific Loop and Transport Data*, QSI Consulting Inc., WT Docket No. 04-313, WC Docket No. 04-313 and CC Docket No. 01-338, at 13 (Oct. 4, 2004) (“*QSI Study*”).

extract the economic characteristics of locations from which one could extrapolate non-impairment. *Compare USTA II*, 359 F.3d at 575 (stating that the Commission cannot ignore facilities deployment along “similar routes”). Effectively, there are no “similar routes” to compare for wholesale DS1 loops. Moreover it cannot be inferred from the presence of fiber into a building that wholesale DS1 loops are available to a particular small business customer at that location. *See, e.g., TRO n.957*. The fiber carrier may not even reach the particular customer in the building or it may have no desire or ability to make DS1 loops available on a wholesale basis. Fiber providers typically do not solicit wholesale DS1 loop customers and, of NuVox’s roughly 36,400 customer connections, NuVox has obtained only 70 from a third party. Coker Decl. ¶ 4. There are unique circumstances in relation to these third-party loops in that they are provided by a small utility, with existing rights-of-way and building access, that has entered into a joint marketing effort with NuVox. Coker Decl. ¶ 4.

The overwhelming evidence that carriers cannot and do not self-deploy DS1 loops and have extremely limited ability to obtain wholesale DS1 loops clearly supports the predictive judgment of national impairment. Indeed, the administrative costs of attempting to identify a few isolated instances of wholesale DS1 availability outweigh any benefits in attempting to eliminate or minimize findings of impairment where none may exist because of the availability of a DS1 loop from a third-party provider.<sup>13/</sup> As the

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<sup>13/</sup> The “cost” of unbundling in this circumstance is further diminished by the likelihood that a carrier will avail itself of a third-party alternative where reasonably available.

*USTA II* Court recognized, any unbundling rule will inevitably lead to some over- and under-inclusiveness. 359 F.3d at 570.

4. **The Impairment Analysis for DS1 Loops Applies to DS1 Transport When Used as a Component of an EEL**

NuVox discusses impairment for DS1 transport in the context of using that transport as the interoffice leg of a DS1 EEL. NuVox defines a DS1 EEL as a combination of a DS1 loop cross connected in an ILEC wire center (in which NuVox is *not* collocated) to a DS1 dedicated interoffice transport facility (without multiplexing to a higher capacity transport facility) that terminates either in a NuVox collocation or a NuVox switch location. NuVox does not seek to have the Commission define a DS1 EEL as a separate network element, although it would be reasonable to do so given that an EEL in reality is a single end-to-end circuit. NuVox does recommend, however, that when assessing whether carriers are impaired without access to DS1 transport, the Commission should distinguish between such transport when used as a component of an EEL as opposed to a DS1 interoffice transport facility used to aggregate traffic from multiple end users.

i. **Carriers Cannot Self-Deploy DS1 EELs**

For impairment purposes, the DS1 transport component of a DS1 EEL shares the characteristics of a DS1 loop in that the revenue opportunity available to overcome entry barriers for the self-deployment of a DS1 EEL is the same as for a DS1 loop. This is because the DS1 interoffice component of a DS1 EEL is not used to aggregate traffic

from a number of end users as is interoffice transport generally.<sup>14/</sup> Rather the DS1 transport leg of the EEL carries the traffic of the single, small business end user served by the DS1 loop component of the EEL. As the name implies, an EEL is simply a longer loop. The revenue generated from the single customer served by the EEL must cover the full cost of the EEL, both the loop and transport component. As the Commission recognized with respect to DS1 loops, the revenue opportunity is insufficient to recover the sunk cost of constructing a DS1 loop. *TRO* ¶ 326. The same conclusion applies to DS1 EELs. The revenue opportunity available from a DS1 EEL is simply insufficient to overcome entry barriers associated with the costs of construction, and the costs of construction are even greater for DS1 EELs than those associated with DS1 loops (*i.e.*, costs of both loop and transport legs must be considered for EELs).<sup>15/</sup>

ii. **Wholesale Alternatives Do Not Reasonably Exist for DS1 EELs**

Nor is it feasible to replace the ILEC DS1 transport component of the EEL with third-party provided DS1 transport. In NuVox's experience, alternative transport at the DS1 level is not available except in extremely limited circumstances. Coker Decl. ¶ 4. This is consistent with the Commission's finding in the *TRO*,<sup>16/</sup> and this finding was affirmed by the evidence gathered in state proceedings. The QSI study identifies only 49

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<sup>14/</sup> See *TRO* ¶ 370 (noting that CLECs "generally use dedicated transport as a means to aggregate end-user traffic to achieve economies of scale").

<sup>15/</sup> The Commission found in the *TRO* that carriers could not self-deploy any DS1 transport and thus did not adopt a DS1 self-deployment trigger. *TRO* ¶ 409.

<sup>16/</sup> *TRO* ¶ 390.

routes in 14 states where 2 or more wholesale carriers stated they made DS1 wholesale service available.<sup>17/</sup> Thus, as with DS1 wholesale loops, a national finding of impairment is fully justified given the extreme paucity of DS1 wholesale transport. And, as with DS1 loops, the administrative burden of identifying routes that may have sufficient DS1 wholesale transport availability far outweighs the incremental benefit of attempting to eliminate all possibility of requiring unbundling where carriers may not be impaired.

Impairment is evidenced not only by the general lack of DS1 wholesale transport, but also by the significant economic and operational barriers to utilizing third party transport providers at the DS1 level, especially when used to transport the traffic of only a single end user as part of EEL-type arrangement. Using third-party providers for the transport leg of the EEL would require breaking apart what is in reality a single end-to-end circuit. Coker Decl ¶ 11. In virtually all circumstances, the third-party provider would be able at most to provide only the interoffice piece of the EEL. It would not be able to also provide the DS1 loop to the customer. Thus, what is now a single circuit offered by one carrier (the ILEC) would have to be broken into a loop piece provided by the ILEC and a transport piece provided by the third party. Because, by definition with respect to an EEL, NuVox will not have a collocation arrangement in the wire center where the loop terminates,<sup>18/</sup> existing loops will have to be disconnected and a new loop

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<sup>17/</sup> *QSI Study* at 3, 20.

<sup>18/</sup> EELs are designed to enable carriers to access loops without the cost of collocation at the wire center where the loop is terminated.

ordered to be cross-connected directly to the third-party providers' collocation or POP.<sup>19/</sup> Coker Decl. ¶ 11. It is not clear whether the ILECs have processes in place that allow a CLEC to order a loop to the CLEC's customer and have that loop directly cross-connected to a third party transport provider. At a minimum, the process of disconnecting and reordering a loop creates the potential for disruption of service and imposes additional costs in terms of nonrecurring charges in the range of \$200.00 to \$400.00 per circuit. Coker Decl. ¶ 11.

If the Bell Company refused to permit NuVox's DS1 loop to be terminated to a third-party providers' collocation or POP, NuVox would have to undertake the expense of establishing a collocation arrangement. This would, however, undermine the very purpose of an EEL arrangement, which is to enable carriers to extend their footprint without incurring the expense of collocation. *TRO* ¶ 576 (EELs "allow competitive LECs to reduce their collocation costs"). NuVox utilizes EELs to reach wire centers where there is insufficient customer density to warrant the cost of collocation.

An additional set of barriers exists for DS1 EELs that terminate at a NuVox switch rather than in a collocation. To replace the ILEC transport component of such an EEL, the third-party transport provider would have to build into NuVox's switch location in order to be able to provide service to NuVox. *See* Coker Decl. ¶ 10. Although NuVox

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<sup>19/</sup> The third-party provider must be collocated, or at least have a point of presence, in both the wire center in which the loop terminates (in order to cross connect the loop to the third-party provider) and in the wire center where NuVox is collocated, in order to terminate the transport facility, via a cross-connect, to NuVox's collocated equipment. If the third party intends to bring the traffic all the way back to NuVox's switch, an additional set of issues arises, as explained below.