

**BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION**

RULEMAKING TO CONSIDER
AMENDING AND ADOPTING
RULES IN WAC 480-123,
UNIVERSAL SERVICE, TO
IMPLEMENT LEGISLATION
AMENDING AND EXTENDING
THE STATE UNIVERSAL
COMMUNICATIONS SERVICE
PROGRAM

DOCKET UT-190437

COMMENTS ON BEHALF OF THE
OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT

December 16, 2019

I. INTRODUCTION

1. The Public Counsel Unit of the Washington Attorney General's Office ("Public Counsel"), with the assistance of expert consultants Helen Golding and Susan Baldwin,¹ responds to the Washington Utilities and Transportation Commission's ("Commission") Notice of Opportunity to File Written Comments dated November 15, 2019. Public Counsel filed initial comments in this docket on September 9, 2019, and continues to advocate for the principles stated in those comments. Public Counsel appreciates the Commission's efforts to date to update the Universal Service Rules to accommodate the broadened scope provided for in the Second Substitute Senate Bill 5511, enacted in the 2019 Legislative Session ("Broadband Bill"). Public Counsel believes, however, that additional modifications are needed before the new rules should be adopted. Below, Public Counsel presents general comments followed by comments related to specific proposed rules.

II. GENERAL COMMENTS

2. The Commission appropriately set forth in its report to the Legislature at the end of 2018, what would be needed should the Universal Communications Service (UCS) program be revamped rather than given a short-term extension under its original mandate. The Commission stated:

With respect to the UCS program administered by the commission, if legislation is adopted in the 2019 session to extend the current UCS program for more than a one- or two-year period, the commission would immediately open a rulemaking to revamp its rules currently governing distribution of support to the small telephone companies. In particular, the commission would focus its rulemaking on revisions to rules regarding carrier eligibility by including support for broadband services,

¹ Statements of qualifications for both Susan M. Baldwin and Helen E. Golding are attached as Attachments A and B respectively.

establishing service performance and buildout requirements, adopting targeted network expansion and support objectives, and implementing more efficient means of distributing support to eligible carriers. Collectively, rule changes would be designed to ensure Washington realizes more value-added effectiveness in allocating precious state resources towards broadband availability.²

3. The Broadband Bill presents a more comprehensive approach towards the UCS program, creating a new UCS covering the next five years (2020-2025), rather than simply extending the current program. The Commission’s Notice of Opportunity to File Written Comments dated August 9, 2019, requested comments exploring how best to address the expanded scope of UCS through the Commission’s rules.
4. Public Counsel submitted comments, as did three other parties: (1) AT&T Corp., Teleport Communications America, LLC and New Cingular Wireless PCS, LLC (collectively AT&T), (2) the Washington Independent Telecommunications Association (WITA), and (3)

² Washington Utilities and Transportation Commission, REVISING WASHINGTON’S UNIVERSAL COMMUNICATIONS SERVICES PROGRAM, PRELIMINARY REPORT 4 (Dec. 31, 2018) (“Report”). At pages 8-9 of the Report, the Commission spelled out areas to be revisited in its UCS rules, should the legislature authorize a significant extension in the program, under the proposed, revised mandate. These included changes that would “materially revise the current eligibility and disbursement criteria,” and specifically referenced the following:

1. Revamping the current method used to determine funding levels for USC program recipients,
2. Revising or eliminating carrier-specific earnings tests used to determine eligibility in favor of service area funding, that may include incentives for expanding services, particularly broadband network services and facilities, to unserved or underserved areas of eligible carriers,
3. Modifying funding from simple subsidization of providers based on their continued provision of legacy telephone service to funding for both legacy service and broadband buildout with potential deployment or service performance conditions,
4. Reducing or eliminating carrier-of-last-resort obligations for legacy telephone services in areas where substantial competitive substitutes exist,
5. Harmonizing existing federal broadband subsidization programs with UCS program funding to increase effectiveness in expanding service availability,
6. Identifying and incorporating efficiency incentives and broadband service performance and deployment objectives into funding criteria used to make distributions,
7. Broadening the scope of eligible recipients, over the long term, subject to financial, technical, and service area qualification criteria,
8. Segmenting a portion of available program funds to be available on a more competitively neutral basis (such as a competitive grant program), and
9. Addressing any other broadband funding issues or suggestions raised by stakeholders during the rulemaking process.)

Forbes Mercy, President of Washington Broadband, Inc. and Washington Telco LLC. Comments filed by AT&T were limited in scope, but generally embraced the use of UCS funds predominately for broadband projects, with the goal of maximizing the number of locations that can be served with limited program dollars. According to AT&T, “Because fixed wireless broadband service often allows robust retail broadband service at a cost per location that is less than wired technologies, state programs should not disadvantage wireless relative to wired technologies in competing for funding.”³

5. WITA, whose rural incumbent local exchange carrier (ILEC) members have been the exclusive recipients funds disbursed under the UCS established under the 2013 law, strongly supported an approach rooted in the status quo.⁴ Although WITA proposes that eligibility be de-linked from rate of return-related indicators, it advocates that the Commission continue to determine the distribution amount based on the historical components used under the prior UCS program.⁵ Its primary justification for this approach is that these data are known and readily available.

6. Mr. Mercy’s letters (August and November) advance strong views concerning the unregulated status of Internet services providers and the harms he believes to result from any legislative or regulatory framework that associates broadband with the provision of traditional telecommunication services.

7. Among other things, Public Counsel’s initial comments in this proceeding urged the Commission to (1) prioritize funding to projects for broadband deployment at benchmark speeds

³ AT&T Comments (Sept. 9, 2019) at 4.

⁴ WITA Comments (Sept. 9, 2019) at 6 (WITA frames its argument around the maxim “First, do no harm.”)

⁵ *Id.* at 22.

and that did not require an ongoing maintenance subsidy; (2) place more emphasis on cost accountability and less on traditional measures associated with revenue shortfall; and (3) ensure that providers were using UCS funds for incremental broadband coverage (beyond commitments undertaken pursuant to the Federal Communications Commission’s (FCC) Connect America Fund (CAF) program or other grants). Public Counsel’s recommendations aligned very closely with the objectives listed by the Commission at pages 8-9 of its December 2018 Report to the Legislature.

8. From Public Counsel’s perspective, the proposed rules do not accomplish a number of key objectives that the Commission set out in its December 2018 Report to the Legislature and its August 9, 2019 Notice of Opportunity to File Written Comments. Rather than creating a new framework, the proposed rules make smaller, incremental changes that sometimes create an unnecessary hybrid of the old and new frameworks.

9. To be sure, there are challenges in aligning the Commission’s current rules with the new statutory requirements presented in the Broadband Bill, particularly when it comes to shifting the primary drivers for fund allocation and distribution from the old framework to the new framework. Public Counsel agrees with the Commission’s proposal to deemphasize rate of return and basic service rate instability as primary drivers. However, it would be similarly appropriate to move away from reliance on preservation of historic voice service-related revenues as the basis for allocating funds. Additionally, the fund size continues to be quite small, and this requires thoughtful targeting of funds. Finally, the rules must deal with the provision in the Broadband Bill for expanding UCS eligibility to “other” providers on terms that make participation from such other providers unlikely.

10. Public Counsel is cognizant of the efforts to the draft rules to address the challenges posed by the new statutory requirements. Going forward, Public Counsel recommends that the Commission fortify the proposed rules by going into greater detail about plan and application-specific requirements, while placing less emphasis on the traditional ILEC accounting documents, such as those referenced in proposed WAC 480-123-110(e).⁶ The rules appear to acknowledge that the Commission typically has access through other rules and procedures to many of the accounting documents maintained by regulated ILECs for regulated services.⁷ Establishing accountability for broadband support requires a different approach that focuses on ensuring deployment and the use of funds for broadband purposes.
11. The new UCS program authorized by the Broadband Bill should be focused primarily on promoting new broadband deployment, with an emphasis on making clear progress towards an evolving speed benchmark. Under this approach, described in Public Counsel's initial comments, expansion of broadband availability would be prioritized over ongoing subsidies of existing broadband, particularly broadband service below benchmark speeds. AT&T's comments also emphasize using funds for new deployment and the benefit of providing potential applicants with clear guidance.
12. WITA suggests a different path in its comments. WITA suggests that UCS funds should be allocated following primarily the same guidelines and award procedures that were established for the original UCS, with the exception of the requirement to show need based on rate instability. The original UCS program provided transitional funding related to changes in the

⁶ Among others, these include documents such as the provider's balance sheet, statements of income and retained earnings, and consolidated audited financial statements and various information relative to the provider's earned rate of return on regulated operations in Washington.

⁷ See WAC 480-123-110(4).

FCC’s intercarrier compensation regime. And, while the Broadband Bill refers to both voice and broadband service,⁸ the original UCS might have been allowed to expire absent the clear legislative objective to promote broadband deployment. This suggests that it is not necessary to keep the same guidelines and award procedures.

13. Public Counsel encourages the Commission to target its limited funding to services operating at benchmark speeds, which would in turn encourage the widest participation the statutory framework will allow. Public Counsel is concerned that by not setting benchmark speeds, applicants will be insulated from having to expand their broadband mission. While the current UCS program produced results appropriate for its framework, the Broadband Bill provides clear direction regarding Washington’s broadband goals.

14. Both the statute⁹ and the Commission’s rules allow for participation in UCS by mobile wireless providers (the statute uses the term “radio communications service company”), while the Commission’s rules reference providers licensed by the FCC’s under the “commercial mobile radio service.” Public Counsel notes the Commission’s original UCS rules provide that criteria for wireless provider participation will be developed with input from the Advisory Board. Assuming that there is interest on the part of wireless providers, the Commission should take steps to address gaps in its rules with respect to participation in UCS by mobile wireless providers, if necessary.

⁸ See Broadband Bill, SB 5511 § 12(1) (2019).

⁹ Both the 2013 and the new 2019 versions.

15. The Commission’s 2018 Report to the Legislature makes clear that non-traditional providers have an important role to play in expanding broadband availability. Indeed, the Commission observed, at page 8, the following:

Available funding at the federal level is increasingly disbursed according to more competitively-neutral eligibility criteria that no longer favor certain categories of carriers based on their legacy position in the telecommunications marketplace. Additionally, funding is also increasingly agnostic with respect to the type of technology employed by carriers that seek federal support. In doing so, federal policymakers are using more effective tools to maximize allocative efficiency and increase consumer welfare in awarding public funding for broadband services. Competitive assessments of grant and loan applications, or employment of reverse auctions, have become the preferred means to ensure the widest deployment of broadband service and enhance broadband availability in low-density, high-cost areas of the country.

While the Broadband Bill nominally expands eligibility to “other” providers, the restrictions imposed by Section 12 (3)(b) pose a significant barrier.¹⁰ In particular, as Public Counsel previously noted, the requirement in the Broadband Bill that “other” providers (non-ILEC, non-mobile wireless) submit to “ILEC-like” regulation effectively dampens the invitation for broader participation.¹¹ The Commission’s rules should allow for maximum participation within the boundaries of the Broadband Act.

16. Public Counsel will turn next to comments regarding particular proposed rules.

¹⁰ Additional providers not covered by the original UCS framework (what the Commission refers to as “other” providers) are only eligible if: “(b) The communications provider demonstrates to the commission that the communications provider is able to provide the same or comparable services at the same or similar service quality standards at a lower price; and: (i) Will provide communications services to all customers in the exchange or exchanges in which it will provide service; and (ii) submits to the commission's regulation of its service as if it were the incumbent local exchange company serving the exchange or exchanges for which it seeks distribution from the account.” Public Counsel notes that, by contrast, mobile wireless companies eligible for support under subsection (3)(a) of Section 12, are not subject to ILEC-style regulation (such regulation being expressly preempted by federal law). As the Commission is aware, some of the FCC’s recent CAF awards to extend broadband to unserved rural areas have gone to providers whose platforms support voice but do not offer a discrete telecommunications service.

¹¹ Public Counsel Comments (Sept. 9, 2019) at 15.

III. WAC 480-123-020 (DEFINITIONS)

17. The Commission proposes to add a new definition for “broadband service” in WAC 480-123-020. The following language is included in the definition: “To be considered advanced telecommunications, broadband must be at, or above, a minimum download and upload speed. The Commission will establish a minimum upload and download speed benchmark for broadband service to be considered advanced telecommunications.” The proposed rule declines to establish minimum speed thresholds.
18. Public Counsel recommended in its initial comments that the Commission set minimum speed thresholds consistent with the current FCC benchmark, which is also consistent with the expressed goals of the Broadband Bill.¹² If the concern is that the minimum speed thresholds may change over time, perhaps a reference to the statute or federal rule would allow the Commission’s rule to have longevity and reduce the need to amend the rule when statutory or Federal policy changes occur. Establishing the minimum speed thresholds is important in advancing Washington’s broadband goals and in providing transparency and guidance to potential applicants.
19. Public Counsel acknowledges that under current FCC rules, ILECs serving low-density areas do not have to serve all of their service territory at the 25/3 Mbps benchmark in order to obtain CAF funding. However, Public Counsel does not agree that it would be counterproductive

¹² The first enumerated goal in Section 5 of the Broadband Bill is that “(1) By 2024, all Washington businesses and residences have access to high-speed broadband that provides minimum download speeds of at least twenty-five megabits per second and minimum upload speeds of at least three megabits per second.” Section 18, which provides guidance to the Commission on rule revisions to implement the new law, speaks of the need to establish “(c) Support amounts for maintaining systems that meet federal or state broadband speed guidelines.” As noted, the current federal guideline for wireline broadband is 25/3 Mbps; the only state guideline mentioned in the bill is also a minimum of 25/3 Mbps.

to the ongoing efforts to provide broadband in Washington’s rural communities to apply a more ambitious goal than what is required by a specific FCC program. UCS funds should not be seen as simply supplementing federal funding for obligations incurred under the federal broadband initiative. Washington State may aspire to bring a more capable level of broadband service to its residents as a prerequisite for offering a *separate state-sponsored funding stream*.

20. Public Counsel proposes that the Commission’s definition of broadband, for purposes of the state-sponsored UCS, specify minimum speed thresholds of 25/3 Mbps for fixed service and 10/1 Mbps for mobile wireless service, consistent with the current FCC benchmarks. AT&T, which notes that providers will benefit if the rules are specific about the criteria for UCS awards, also recommends a 25/3 benchmark. Furthermore, a 25/3 Mbps benchmark is specifically referenced in the Broadband Bill.¹³ Individual determinations will still occur as applicants apply for funding, and the Commission has the option of granting waivers for good cause shown, which provides the Commission with flexibility.

IV. WAC 480-123-100 (PREREQUISITES FOR REQUESTING PROGRAM SUPPORT)

21. With respect to WAC 480-123-100(1), the draft rules add the clause “for telecommunications and broadband service” relative to wireline providers. Additionally, the proposed rule adds references to the requirements for a plan to provide, maintain, or enhance broadband service, and strikes the requirement that the provider maintain residential local exchange rates at or above the urban floor established by the FCC.

¹³ Broadband Bill, SB 5511 §§ 2 and 5.

22. It is well understood that small ILECs (those with 40,000 or fewer lines) are eligible to participate in UCS. Public Counsel does not object to the proposed language in WAC 480-123-100(1), provided that it is understood that UCS funds will not be used to make up any shortfall in revenues associated with residential local exchange service, whether because of a provider's failure to maintain residential local exchange rates at or above the urban rate floor or for any other reason.
23. With respect to WAC 480-123-100(2), the proposed rule adds "for telecommunications and broadband services" relative to wireless providers and adds eligibility criteria for "other" providers. Public Counsel has no objections to the proposed provisions in subsection (2), but notes that providers of fixed wireless broadband services, who could potentially extend broadband to unserved remote areas, do not appear to be included within the statutory definition or within the proposed rule as "wireless communications providers."
24. With respect to WAC 480-123-100(3), the proposed rule adds a new subsection to include "other communication providers." Under the proposed rule, in order to qualify to apply for UCS support, such providers must have a plan, similar to wireline and wireless providers. The non-ILEC / non-wireless provider must also (1) be authorized to provide telecommunications service in the state of Washington, (2) be able to demonstrate that it can provide telecommunications and broadband services to *all* residential and business locations in the exchange(s) for which it seeks support, (3) "irrevocably commit" to maintain this capability "for as long as it receives support" and (4) commit to provide service upon request throughout the exchange(s). The provider must also (5) agree to offer "basic exchange telecommunications

services” to both residential and business customers, in accordance with WAC 480-120-021 and RCW 80.36.630, and (6) be designated as an eligible telecommunications carrier.

25. Although, as noted in the Commission’s Report to the Legislature, “a variety of providers offer broadband services across Washington: incumbent telephone companies, cable companies, fixed and mobile wireless companies, public utility districts (wholesale), and satellite companies,”¹⁴ the original UCS only offered support to small ILECs and small mobile wireless companies. Section 12 of the Broadband Bill, setting forth the parameters of the new UCS, nominally expands eligibility, but subject to conditions that make broader participation unlikely.¹⁵ Public Counsel appreciates, however, the attempt in WAC 480-123-100(3) to avoid linking eligibility to full ILEC-like regulation.

V. WAC 480-123-110 (PETITION FOR ELIGIBILITY TO RECEIVE PROGRAM SUPPORT)

26. WAC 480-123-110 provides both plan-specific requirements and general financial and accounting requirements. Plan-specific requirements are contained in subsection (1)(d), which sets out elements of the provider’s broadband plan. The requirements in this section assume

¹⁴ Report at 4. Public Counsel notes that ILECs have been granted funds to support infrastructure expansion using fixed wireless. See, e.g. Report at 48. There are also, however, non-ILEC providers who would be capable of deploying fixed wireless broadband services, but who would seem to fall into the “other” category.

¹⁵ Although the Commission had recommended to the legislature that UCS program funding “harmonize” with federal programs “to increase effectiveness in expanding service availability,” the Broadband Bill’s criteria and the proposed rules intended to implement them are more restrictive than eligibility to participate in the FCC’s CAF II auctions. Current FCC rules permit some of the funds for rural, insular, and high cost areas to be disbursed to “eligible broadband Internet access services.” 47 C.F.R. § 54.101(a)(2) provides that “[e]ligible broadband Internet access services must provide the capability to transmit data to and receive data by wire or radio from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up service.” While the initial rounds of CAF focused on getting the participation of incumbent LECs, the CAF II auctions expanded efforts to fill the remaining broadband coverage gaps by establishing qualifications that could be met by other providers, such as terrestrial fixed wireless providers (known as Wireless Internet Service Providers (WISPs)). Speed and latency testing will be used ensure that the broadband service quality necessary to support reliable use of the connection for voice service is maintained. See generally, *In the Matter of Connect America Fund*, WC Docket 10-90, Order, DA 18-710 (July 6, 2018).

certain characteristics will be present in a petitioner’s broadband plan, but the requirements listed should be clarified. For example, it may be assumed that the plans will include specific proposals for funding, but listing that as an element of a broadband plan would provide clarity.

Additionally, the broadband plan should also include information about costs to carry out the plan.

27. In WAC 480-123-110(1)(d)(i), the proposed rule asks for a multi-year investment plan. It may be assumed that a petitioner would set out the number of years and the scope of the plan, but specifically asking for that information in rule would provide useful guidance as petitioners develop their broadband plans.. Also, WAC 480-123-110(1)(d)(ii) refers to “broadband services at required speeds required by the Commission or the Federal Communications Commission.” This section should be clarified to include the speed required by the Commission and direction regarding which commission’s requirement takes precedent if there is a conflict between the Washington Commission and the FCC. If the Commission does not include a benchmark speed requirement in rule, this subsection needs clarification regarding the intent of referring to the speed required by the Commission.

28. Additionally, WAC 480-123-110(1)(d)(iii) refers to the “number of locations served in each phase or year of a company’s deployment plan.” This section should be clarified regarding whether the Commission will use this information to inform a multi-year commitment of UCS funds or simply to obtain a better understanding of how the company intends its plan to proceed. Existing language in (d) pertaining to the risk of rate instability or service interruptions in the absence of support is apparently stricken, consistent with the revised focus of the program. Subsection (iv) is a catchall for any other information the Commission might require and will be

particularly useful as a backstop while the Commission evaluates applications for support of broadband projects under the new UCS framework.

29. The Commission should attempt to be more detailed and specific with regard to the elements of a provider's broadband plan. In this regard, Public Counsel disagrees with the approach recommended by WITA, which would have the Commission de-emphasize broadband plan detail in favor of traditional universal service allocation methods. The type of information included in the Broadband Bill's criteria for grants through the Broadband Office and in the Commission's August Notice is fully relevant to assessing applications for funding from the new UCS. Although the programs are structured differently, many of the criteria set forth in Broadband Bill Section 7(5)¹⁶ should also become requirements of a provider's broadband plan with the Commission. The Commission might also reference the information required in FCC Form 683, the application for Connect America Fund Phase II Auction Support, which includes various financial and project-specific information.¹⁷

30. WAC 480-123-110(1)(e) focuses on detailed financial information and supporting documentation and retains much of the original framework. This type of information becomes increasingly less relevant if the UCS successfully transitions from being a replacement for

¹⁶ Detailed information required under this section includes, among other things, (a) The location of the project; (b) Evidence regarding the unserved nature of the community in which the project is to be located; (c) Evidence that proposed infrastructure will be capable of scaling to greater download and upload speeds; (d) The number of households passed that will gain access to broadband service as a result of the project or whose broadband service will be upgraded as a result of the project; and (e) The estimated cost of retail services to end users facilitated by a project; (f) The proposed actual download and upload speeds experienced by end users; (k) The estimated total cost of the project; (l) Other sources of funding for the project that will supplement any grant or loan award; (m) A demonstration of the project's long-term sustainability, including the applicant's financial soundness, organizational capacity, and technical expertise.; and (n) A strategic plan to maintain long-term operation of the infrastructure.

¹⁷ See. *FCC Form 683: Application for Connect America Fund Phase II Auction Support*, Federal Communications Commission (Aug. 30, 2018), available at <https://docs.fcc.gov/public/attachments/DA-18-887A4.pdf>.

traditional high-cost telecommunications support to being primarily a vehicle for promoting broadband investment in Washington. In any event, the Commission can obtain information in subsection (e) under other rules. While the Commission should continue to obtain assurances that a UCS grant recipient is financially stable and capable of fulfilling its broadband commitments, much of the detail relating to regulated ILEC financial reporting could be eliminated from the current rule.

31. WAC 480-120-110(1)(j) requires that a provider satisfy at least one of four eligibility criteria. The purpose of these criteria is unclear within WAC 480-120-110, but are used in WAC 480-123-120, which is discussed below.

VI. WAC 480-123-120 (ELIGIBILITY AND DISTRIBUTION FROM THE PROGRAM)

32. WAC 480-123-120 sets forth the proposed distribution methodology. The criteria set forth in WAC 480-123-110(1)(j) are used to determine the distribution methodology for a carrier.
33. From Public Counsel's perspective, the proposed rule for ILEC distributions set forth in WAC 480-123-120(1) and (2) should be modified. There is no statutory requirement or policy reason to continue to link UCS support to historical revenue flows from intercarrier compensation. Indeed, the Legislature eliminated preexisting language regarding this transitional subsidy from the description of the UCS fund. As a result, Public Counsel believes that there should be no automatic entitlement level under the new UCS framework. Rather, all applications should be judged according to criteria focused on obtaining the greatest possible expansion in benchmark-level broadband availability at the lowest cost. As Public Counsel noted in its initial comments, "applications to receive funds should contain specific information about the

committed coverage and speeds, a committed timeframe from project completion, the estimated costs, and the estimated rates to be charged to end users (in line with an affordability benchmark).”¹⁸

34. WAC 480-123-120(3) and (4) pertain to wireless providers and “other” providers. Each of those sections refer to the Broadband Bill and “the Commission’s rules.” Just as distributions to wireline providers should be based on criteria focused on obtaining the greatest expansion of benchmark-level broadband at the lowest cost, so should distributions to wireless and other providers. The applications of these providers should likewise contain information about coverage and speeds, timeframe, costs, and rates, as detailed above.

35. WAC 480-123-120(5) adds important language regarding support being contingent on a provider’s commitment to deploy broadband to at least those locations the deemed by the Commission to be the “broadband deployment obligation.” Moreover, the proposed rule specifies that such deployments “are in addition to any Federal Communications Commission deployment requirements.” Subsection (5) incorporates important accountability provisions that will ensure that the UCS funds are used for incremental improvements to Washington’s broadband that would not otherwise be accomplished.

36. WAC 480-123-120(6) retains the Commission’s original provision regarding pro rata distribution of funds in the event that total eligible requests exceed available funding. From Public Counsel’s perspective, retaining a pro rata distribution methodology could result in less efficient fund allocation. Public Counsel believes the Commission should determine which applications deserve priority and fund those proposals as fully as possible, with pro rata

¹⁸ Public Counsel Comments (Sept. 9, 2019) at 13.

distribution used as a last resort. As Public Counsel previously recommended, funding priority should be given to projects that deploy broadband to unserved areas at benchmark speeds and that do not require ongoing operational subsidies. If the Commission moves forward with the approach in the draft rule, Public Counsel recommends that the Commission use the Advisory Board for input on how to optimize a pro rata distribution methodology.

VII. WAC 480-123-130 (REPORTING REQUIREMENTS)

37. The proposed rule adds details regarding reporting requirements. A key requirement in WAC 480-123-130 continues to be subsection (1)(b), which requires wireline providers to provide “detailed information on how the provider used program support” received during the preceding year. The proposed rule leaves the reporting requirements for wireless and “other” providers undefined, stating only that the Advisory Board will offer recommendations to the Commission on the “information and reports” that such providers must submit. At a minimum, subsections (2) and (3) should be revised to include a requirement similar to that in subsection (1)(b), i.e., that the provider report detailed information on how the provider used program support received during the preceding year.

38. WAC 480-123-130(1)(i) provides that wireline providers will provide the Commission with a copy of the provider’s FCC Form 477. Reliance on the FCC’s Form 477 will be useful until the FCC requires more specific data that captures deployment at a more granular level than the census block. Public Counsel supports using FCC Form 477 data until more granular data becomes available.

39. To the extent that the Commission grants multi-year funding to a provider, the report requirements contain in proposed rule WAC 480-123-130 should cumulatively extend to each of the grant years.

VIII. WAC 480-123-150 (ADVISORY BOARD)

40. The primary amendment to this rule is the addition of a representative from the Governor's State Broadband Office and clarification that the Commission can modify the number of seats on the Advisory Board. Public Counsel does not have objections to either of these proposed modifications, but rather views the expansion of the Advisory Board as promoting coordination of the State's broadband expansion objectives. Additionally, Public Counsel does not object to use of the Advisory Board to provide input to the Commission as detail throughout the draft rules. The proposed uses of the Advisory Board is consistent with the Board's purpose.

41. Reference to the Public Counsel Unit should be changed from "section" to "unit" to more accurately reflect Public Counsel's name. Public Counsel affirms its willingness and support to being named a permanent member of the Advisory Board.

IX. CONCLUSION

42. Public Counsel appreciates the opportunity to file these written comments. The directive in the Broadband Bill adds a new dimension to the Commission's UCS program that will ultimately benefit the people of Washington. The goals under the Broadband Bill are ambitious, and the Commission's UCS program plays a role in achieving Washington's broadband deployment goals.

43. The proposed rules begin to address incorporating the expanded scope of the UCS into the Commission's rules. As outlined above, Public Counsel believes that modification and augmentation of the draft rules should occur before they are adopted.

44. We look forward to reading the comments filed by other stakeholders and participating in further process in this docket. If you have any questions about these comments, please contact Lisa Gafken at Lisa.Gafken@atg.wa.gov or (206) 464-6595.

DATED this 16th day of December 2019.

ROBERT W. FERGUSON
Attorney General

/s/ Lisa W. Gafken
LISA W. GAFKEN, WSBA No. 31549
Assistant Attorney General
Public Counsel Unit Chief

Attachment A

SUSAN M. BALDWIN
13 Church Hill Street
Watertown, Massachusetts 02472
617-388-4068
smbaldwinconsulting@gmail.com
smbaldwinconsulting.com

Susan M. Baldwin specializes in utility economics, regulation, and public policy, with a long-standing focus on telecommunications and with a more recent focus on consumer issues in electric and gas markets. Ms. Baldwin has been actively involved in public policy for forty-one years, which includes thirty-five years in telecommunications policy and regulation, and eleven years in energy policy and regulation. Since 2001, she has been consulting to public sector agencies, consumer advocates, and others as an independent consultant. Ms. Baldwin received her Master of Economics from Boston University, her Master of Public Policy from Harvard University's Kennedy School of Government, and her Bachelor of Arts degree in Mathematics and English from Wellesley College. Ms. Baldwin has extensive experience both in government and in the private sector.

Ms. Baldwin has testified before 24 public utility commissions in more than 75 state proceedings, including: the Arkansas Public Service Commission, California Public Utilities Commission, Colorado Public Utilities Commission, Connecticut Department of Public Utility Control, District of Columbia Public Service Commission, Idaho Public Utilities Commission, Illinois Commerce Commission, Indiana Utility Regulatory Commission, Iowa Utilities Board, Maryland Public Service Commission, Massachusetts Department of Telecommunications and Cable, Nevada Public Service Commission, New Hampshire Public Utilities Commission, New Jersey Board of Public Utilities, New Mexico Public Regulation Commission, New York Public Service Commission, Public Utilities Commission of Ohio, Pennsylvania Public Utility Commission, Rhode Island Public Utilities Commission, Tennessee Public Service Commission, Vermont Public Service Board, Washington Utilities and Transportation Commission, Public Service Commission of West Virginia and Wyoming Public Service Commission. Ms. Baldwin has also authored numerous comments and declarations submitted in various Federal Communications Commission proceedings.

Ms. Baldwin has also participated in projects in Delaware, Hawaii, Illinois, New York, South Dakota, and Canada on behalf of consumer advocates, public utility commissions, and competitive local exchange carriers. Ms. Baldwin has served in a direct advisory capacity to public utility commissions in the District of Columbia, Massachusetts, New Mexico, Utah and Vermont. Ms. Baldwin has also testified on behalf of public utility commission staff in Idaho and Rhode Island. Ms. Baldwin has testified before state legislative committees in Maryland, Massachusetts, Ohio, and Pennsylvania.

Ms. Baldwin has sponsored expert reports in state taxation proceedings. Also, in her capacity as an independent consultant, Ms. Baldwin has consulted to and testified on behalf of consumer advocates on diverse matters including the electric retail market, consumer protection and consumer services issues in telecommunications, electric, and gas proceedings, broadband

deployment, numbering resources, unbundled network element (UNE) cost studies, incumbent local exchange carriers' requests for competitive classification of services, mergers and spin-offs, rate cases, universal service, service quality, and state *Triennial Review Order* (TRO) proceedings.

Ms. Baldwin sponsored detailed testimony on behalf of the Connecticut Office of Consumer Counsel in 2019 and in 2014 regarding the third-party residential electric market. In her testimony, she summarized her detailed analysis of the prices that retail customers of suppliers pay and her review of consumer complaints regarding the retail electric market. In 2018, Ms. Baldwin co-authored an analysis of Maryland's residential electric and gas supply markets on behalf of the Maryland Office of People's Counsel. She also conducted an in-depth analysis of the retail residential electric market in Massachusetts for the Massachusetts Office of the Attorney General.

Ms. Baldwin has analyzed customer service issues in many electric and gas rate case proceedings on behalf of consumer advocate offices. Ms. Baldwin has worked with local, state, and federal officials on energy and environmental issues. As a policy analyst for the New England Regional Commission (NERCOM) and Massachusetts Office of Energy Resources (MOER), she acquired extensive experience working with governors' offices, state legislatures, congressional offices, and industry and advocacy groups. As an energy analyst for NERCOM, Ms. Baldwin coordinated New England's first regional seminar on low-level radioactive waste, analyzed federal and state energy policies, and wrote several reports on regional energy issues. While working with the MOER, Ms. Baldwin conducted a statewide survey of the solar industry and analyzed federal solar legislation. While attending the Kennedy School of Government, Ms. Baldwin served as a research assistant for the school's Energy and Environmental Policy Center.

Ms. Baldwin has contributed to numerous comments submitted to the FCC on diverse aspects of broadband in various proceedings on topics such as data collection, mapping, deployment, universal service, affordability, consumer protection, and network management. Also, in state regulatory proceedings that have examined carriers' proposals for spin-offs and for mergers, she has recommended conditions concerning broadband deployment.

Ms. Baldwin served as a direct advisor to the Massachusetts Department of Telecommunications and Energy (DTE) between August 2001 and July 2003, in Massachusetts DTE Docket 01-20, an investigation of Verizon's total element long run incremental cost (TELRIC) studies for recurring and nonrecurring unbundled network elements (UNEs). She assisted with all aspects of this comprehensive case in Massachusetts. Ms. Baldwin analyzed recurring and nonrecurring cost studies; ran cost models; reviewed parties' testimony, cross-examined witnesses, trained staff, met with the members of the Commission, assisted with substantial portions of the major orders issued by the DTE; and also assisted with the compliance phase of the proceeding.

Ms. Baldwin has also contributed to numerous comments and declarations submitted to the Federal Communications Commission on issues such as broadband; intercarrier compensation reform; the Comcast-NBCU merger, price cap regulation; universal service; carriers' petitions

for forbearance; separations reform; special access services, relay services; numbering optimization, and the Internet Protocol transition.

Ms. Baldwin worked with Economics and Technology, Inc. for twelve years (1984 to 1988 and 1992 to 2000), most recently as a Senior Vice President. Among her numerous projects were the responsibility of advising the Vermont Public Service Board in matters relating to a comprehensive investigation of NYNEX's revenue requirement and proposed alternative regulation plan. She participated in all phases of the docket, encompassing review of testimony, issuance of discovery, cross-examination of witnesses, drafting memoranda and decisions, and reviewing compliance filings. Another year-long project managed by Ms. Baldwin was the in-depth analysis and evaluation of the cost proxy models submitted in the FCC's universal service proceeding. Also, on behalf of the staff of the Idaho Public Utilities Commission, Ms. Baldwin testified on the proper allocation of US West's costs between regulated and non-regulated services. On behalf of AT&T Communications of California, Inc. and MCI Telecommunications Corporation, Ms. Baldwin comprehensively analyzed the non-recurring cost studies submitted by California's incumbent local exchange carriers. Ms. Baldwin has participated in more than twenty state and federal regulatory investigations of the impact of proposed transfers of control of wireline, wireless and cable companies.

Ms. Baldwin has contributed to the development of state and federal policy on numbering matters. On behalf of the Ad Hoc Telecommunications Users Committee, Ms. Baldwin participated in the Numbering Resource Optimization Working Group (NRO-WG), and in that capacity, served as a co-chair of the Analysis Task Force of the NRO-WG. She has also provided technical assistance to consumer advocates in the District of Columbia, Illinois, Iowa, Massachusetts, and Pennsylvania on area code relief and numbering optimization measures. Ms. Baldwin also co-authored comments on behalf of the National Association of State Utility Consumer Advocates in the FCC's proceeding on numbering resource optimization.

During her first years at ETI, Ms. Baldwin was the Director of Publications and Tariff Research, and, in that capacity, she trained and supervised staff in the analysis of telecommunications rate structures, services, and regulation.

Ms. Baldwin served four years (1988-1992) as the Director of the Telecommunications Division for the Massachusetts Department of Public Utilities (now the Department of Telecommunications & Cable), where she directed a staff of nine, and acted in a direct advisory capacity to the DPU Commissioners. (The Massachusetts DTC maintains a non-separated staff, which directly interacts with the Commission, rather than taking an advocacy role of its own in proceedings). Ms. Baldwin advised and drafted decisions for the Commission in numerous DPU proceedings including investigations of a comprehensive restructuring of the rates of New England Telephone Company (NET), an audit of NET's transactions with its NYNEX affiliates, collocation, ISDN, Caller ID, 900-type services, AT&T's request for a change in regulatory treatment, pay telephone and alternative operator services, increased accessibility to the network by disabled persons, conduit rates charged by NET to cable companies, and quality of service. Under her supervision, staff analyzed all telecommunications matters relating to the regulation of

the then \$1.7-billion telecommunications industry in Massachusetts, including the review of all telecommunications tariff filings; petitions; cost, revenue, and quality of service data; and certification applications. As a member of the Telecommunications Staff Committees of the New England Conference of Public Utility Commissioners (NECPUC) and the National Association of Regulatory Utility Commissioners (NARUC), she contributed to the development of telecommunications policy on state, regional, and national levels.

As a budget analyst for the Massachusetts Department of Public Welfare, Ms. Baldwin forecast expenditures, developed low-income policy, negotiated contracts, prepared and defended budget requests, and monitored expenditures of over \$100 million.

Ms. Baldwin received Boston University's Dean's Fellowship. While attending the Kennedy School of Government, Ms. Baldwin served as a teaching assistant for a graduate course in microeconomics and as a research assistant for the school's Energy and Environmental Policy Center, and at Wellesley College was a Rhodes Scholar nominee. She has also studied in Ghent, Belgium.

Record of Prior Testimony

In the matter of the Application of the New Jersey Bell Telephone Company for Approval of its Plan for an Alternative Form of Regulation, New Jersey Board of Regulatory Commissioners Docket No. T092030358, on behalf of the New Jersey Cable Television Association, filed September 21, 1992, cross-examined October 2, 1992.

DPUC review and management audit of construction programs of Connecticut's telecommunications local exchange carriers, Connecticut Department of Public Utility Control Docket No. 91-10-06, on behalf of the Connecticut Office of the Consumer Counsel, filed October 30, 1992, cross-examined November 4, 1992.

Joint petition of New England Telephone and Telegraph Company and Department of Public Service seeking a second extension of the Vermont Telecommunications Agreement, Vermont Public Service Board 5614, Public Contract Advocate, filed December 15, 1992, cross-examined December 21, 1992.

Application of the Southern New England Telephone Company to amend its rates and rate structure, Connecticut Department of Public Utility Control Docket No. 92-09-19, on behalf of the Connecticut Office of Consumer Counsel, filed March 26, 1993 and May 19, 1993, cross-examined May 25, 1993.

In the matter of the Application of Cincinnati Bell Telephone Company for Approval of an Alternative Form of Regulation and for a Threshold Increase in Rates, Public Utilities Commission of Ohio Case No. 93-432-TP-ALT, on behalf of Time Warner AxS, filed March 2, 1994.

Matters relating to IntraLATA Toll Competition and Access Rate Structure, Rhode Island Public Utilities Commission Docket 1995, on behalf of the Rhode Island Public Utilities Commission Staff, filed March 28, 1994 and June 9, 1994, cross-examined August 1, 1994.

In the Matter of the Application of The Ohio Bell Telephone Company for Approval of an Alternative Form of Regulation, Public Utilities Commission of Ohio Case No. 93-487-TP-ALT, on behalf of Time Warner AxS, filed May 5, 1994, cross-examined August 11, 1994.

In Re: Universal Service Proceeding: The Cost of Universal Service and Current Sources of Universal

Service Support, Tennessee Public Service Commission Docket No. 95-02499, on behalf of Time Warner AxS of Tennessee, L.P., filed October 18, 1995 and October 25, 1995, cross-examined October 27, 1995.

In Re: Universal Service Proceeding: Alternative Universal Service Support Mechanisms, Tennessee Public Service Commission Docket No. 95-02499, on behalf of Time Warner AxS of Tennessee, L.P., filed October 30, 1995 and November 3, 1995, cross-examined November 7, 1995.

In the Matter of the Application of US West Communications, Inc. for Authority to Increase its Rates and Charge for Regulated Title 61 Services, Idaho Public Utilities Commission Case No. USW-S-96-5, on behalf of the Staff of the Idaho Public Utilities Commission, filed November 26, 1996 and February 25, 1997, cross-examined March 19, 1997.

A Petition by the Regulatory Operations Staff to Open an Investigation into the Procedures and Methodologies that Should Be Used to Develop Costs for Bundled or Unbundled Telephone Services or Service Elements in the State of Nevada, Nevada Public Service Commission Docket No. 96-9035, on behalf of AT&T Communications of Nevada, Inc., filed May 23, 1997, cross-examined June 6, 1997.

Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture; Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks, California Public Utilities Commission R.93-04-003 and I.93-04-002, co-authored a declaration on behalf of AT&T Communications of California, Inc., and MCI Telecommunications Corporation, filed on December 15, 1997 and on February 11, 1998.

Consolidated Petitions for Arbitration of Interconnection Agreements, Massachusetts Department of Telecommunications and Energy, DPU 96-73/74, 96-75, 96-80/81, 96-83, and 96-84, on behalf of AT&T Communications of New England, Inc. and MCI Telecommunications Corporation, filed February 3, 1998.

In the Matter of the Application of US West Communications, Inc. for Specific Forms of Price Regulation, Colorado Public Utilities Commission Docket No. 97-A-540T, on behalf of the Colorado Office of Consumer Counsel, filed on April 16, 1998, May 14, 1998 and May 27, 1998, cross-examined June 2, 1998.

Joint Application of SBC Communications and Southern New England Telecommunications Corporation for Approval of a Change of Control, Connecticut Department of Public Utility Control Docket No. 98-02-20, on behalf of the Connecticut Office of Consumer Counsel, filed May 7, 1998 and June 12, 1998, cross-examined June 15-16, 1998.

Fourth Annual Price Cap Filing of Bell Atlantic-Massachusetts, Massachusetts Department of Telecommunications and Energy Docket DTE 98-67, on behalf of MCI Telecommunications Corporation, filed September 11, 1998 and September 25, 1998, cross-examined October 22, 1998.

Applications of Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, For Consent to Transfer Control, Federal Communications Commission CC Docket No. 98-141, co-sponsored affidavit on behalf of Indiana Utility Consumer Counselor, Michigan Attorney General, Missouri Public Counsel, Ohio Consumers' Counsel, Texas Public Utility Counsel and Utility Reform Network, filed on October 13, 1998.

In the Matter of the Joint Application of SBC Communications Inc., SBC Delaware, Inc., Ameritech Corporation and Ameritech Ohio for Consent and Approval of a Change of Control, Public Utilities Commission of Ohio Case No.98-1082-TP-AMT, on behalf of Ohio Consumers' Counsel, filed on December 10, 1998, cross-examined on January 22, 1999.

GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee, For Consent to Transfer Control, Federal Communications Commission CC Docket No. 98-184, co-sponsored an affidavit on behalf of a coalition of consumer advocates from Delaware, Hawaii, Maine, Maryland, Missouri, Ohio, Oregon, West Virginia, and Michigan, filed on December 18, 1998.

In the Matter of the Joint Application of GTE and Bell Atlantic to Transfer Control of GTE's California Utility Subsidiaries to Bell Atlantic, Which Will Occur Indirectly as a Result of GTE's Merger with Bell Atlantic, California Public Utilities Commission A. 98-12-005, on behalf of the California Office of Ratepayer Advocate, filed on June 7, 1999.

In the Matter of the Investigation on the Commission's Own Motion Into All Matters Relating to the Merger of Ameritech Corporation and SBC Communications Inc., Indiana Utility Regulatory Commission Cause No. 41255, on behalf of the Indiana Office of Utility Consumer Counselor, filed on June 22, 1999 and July 12, 1999, cross-examined July 20, 1999.

In re Application of Bell Atlantic Corporation and GTE Corporation for Approval of the GTE Corporation - Bell Atlantic Corporation Merger, Washington Utilities and Transportation Commission UT-981367, on behalf of the Washington Attorney General Public Counsel Section, filed on August 2, 1999.

Application of New York Telephone Company for Alternative Rate Regulation, Connecticut Department of Public Utility Control Docket No. 99-03-06, on behalf of the Connecticut Office of Consumer Counsel, filed October 22, 1999.

In re: Area Code 515 Relief Plan, Iowa Utilities Board Docket No. SPU-99-22, on behalf of Iowa Office of Consumer Advocate, filed November 8, 1999, and December 3, 1999, cross-examined December 14, 1999.

In re Application of MCI WorldCom, Inc. and Central Telephone Company - Nevada, d/b/a Sprint of Nevada, and other Sprint entities for Approval of Transfer of Control pursuant to NRS 704.329, Nevada Public Utilities Commission Application No. 99-12029, on behalf of the Nevada Office of the Attorney General, Bureau of Consumer Protection, filed April 20, 2000.

In re: Area Code 319 Relief Plan, Iowa Utilities Board Docket No. SPU-99-30, on behalf of Iowa Office of Consumer Advocate, filed June 26, 2000 and July 24, 2000.

In re: Sprint Communications Company, L.P. & Level 3 Communications, L.L.C., Iowa Utilities Board Docket Nos. SPU-02-11 & SPU-02-13, on behalf of Iowa Office of Consumer Advocate, filed October 14, 2002 and January 6, 2003, cross-examined February 5, 2003.

Illinois Bell Telephone Company filing to increase unbundled loop and nonrecurring rates (tariffs filed December 24, 2002), Illinois Commerce Commission Docket No. 02-0864, on behalf of Citizens Utility Board, filed May 6, 2003 and February 20, 2004.

Qwest Petition for Competitive Classification of Business Services, Washington Utilities and Transportation Commission Docket No. 030614, on behalf of Public Counsel, filed August 13, 2003 and August 29, 2003, cross-examined September 18, 2003.

In the Matter of the Application of CenturyTel of Northwest Arkansas, LLC for Approval of a General Change in Rates and Tariffs, Arkansas Public Service Commission Docket No. 03-041-U, on behalf of the Attorney General, filed October 9, 2003 and November 20, 2003.

In the Matter of the Board's Review of Unbundled Network Elements, Rates, Terms and Conditions of Bell Atlantic New Jersey, Inc., New Jersey Board of Public Utilities Docket No. TO00060356, on behalf of the New Jersey Division of the Ratepayer Advocate, filed January 23, 2004.

In the Matter of the Implementation of the Federal Communications Commission's Triennial Review Order, New Jersey Board of Public Utilities Docket No. TO03090705, on behalf of the New Jersey Division of the Ratepayer Advocate, filed February 2, 2004.

Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Local Exchange Carriers, Federal Communications Commission WC Docket No. 04-313, CC Docket No. 01-338, sponsored affidavit on behalf of the New Jersey Division of the Ratepayer Advocate, filed October 4, 2004.

Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Local Exchange Carriers, Federal Communications Commission WC Docket No. 04-313, CC Docket No. 01-338, sponsored affidavit on behalf of the Utah Committee of Consumer Services, filed October 4, 2004.

In the Matter of Verizon New Jersey, Inc. For a Revision of Tariff B.P.U.-N.J. – No. 2 Providing for a Revenue Neutral Rate Restructure Including a Restructure of Residence and Business Basic Exchange Service and Elimination of \$.65 Credit, New Jersey Board of Public Utilities Docket No. TT04060442, on behalf of the New Jersey Division of the Ratepayer Advocate, filed December 22, 2004 and January 18, 2005.

In the Matter of the Application of Verizon New Jersey, Inc. for Approval (I) of a New Plan for an Alternative Form of Regulation and (II) to Reclassify Multi-Line Rate Regulated Business Services as Competitive Services, and Compliance Filing, New Jersey Board of Public Utilities Docket No. TO01020095, on behalf of the New Jersey Division of the Ratepayer Advocate, filed January 10, 2005 and February 4, 2005.

Joint Petition of SBC Communications Inc. and AT&T Corp., Together with its Certificated Subsidiaries for Approval of Merger, New Jersey Board of Public Utilities Docket No. TM05020168, on behalf of the New Jersey Division of the Ratepayer Advocate, filed May 4, 2005 and June 1, 2005.

In the Matter of Verizon Communications Inc. and MCI, Inc., Applications for Approval of Transfer of Control, Federal Communications Commission WC Docket No. 05-75, co-sponsored affidavit on behalf of the New Jersey Division of the Ratepayer Advocate, filed on May 9, 2005.

In the Matter of the Application of Southwestern Bell Telephone, L.P., d/b/a SBC Arkansas to Set Rates for Unbundled Network Elements, Arkansas Public Service Commission Docket No. 04-109-U, on behalf of the Attorney General, filed May 27, 2005.

Joint Petition of Verizon Communications Inc. and MCI, Inc. for Approval of Merger, New Jersey Board of Public Utilities Docket No. TM05030189, on behalf of the New Jersey Division of the Ratepayer Advocate, filed July 8, 2005 and August 19, 2005.

In the Matter of Joint Petition of United Telephone Company of New Jersey, Inc. d/b/a Sprint and LTD Holding Company for Approval Pursuant to *N.J.S.A. 48:2-51* and *N.J.S.A. 48:3-10* of a change in Ownership and Control, New Jersey Board of Public Utilities Docket No. TM05080739, on behalf of the New Jersey Division of the Ratepayer Advocate, filed November 29, 2005.

In the Matter of the Board's Review of the Classification of Verizon New Jersey's Directory Assistance Services ("DAS") as Competitive and Associated Service Quality, Docket No. TX06010057, In the Matter of the Filing by Verizon New Jersey Inc. for the Reclassification of Existing Rate Regulated Services – Directory Assistance Services as Competitive, New Jersey Board of Public Utilities, Docket No. TT97120889, on behalf of the New Jersey Division of the Ratepayer Advocate, filed May 12, 2006.

In the Matter of AT&T Inc. and BellSouth Corporation Applications for Approval of Transfer of Control, Federal Communications Commission WC Docket No. 06-74, sponsored declaration with Sarah M.

Bosley on behalf of the New Jersey Division of the Ratepayer Advocate, filed June 5, 2006; sponsored declaration with Sarah M. Bosley and Timothy E. Howington on behalf of the New Jersey Division of Rate Counsel, October 3, 2006.

In the Matter of Jurisdictional Separations and Referral to the Federal-State Joint Board, CC Docket No. 80-286, sponsored affidavit on behalf of the National Association of State Utility Consumer Advocates and the New Jersey Division of Rate Counsel, filed August 22, 2006.

In the Matter of the Board Investigation Regarding the Reclassification of Competitive Local Exchange Carrier (CLEC) Services as Competitive, New Jersey Board of Public Utilities Docket No. TX06120841, on behalf of the New Jersey Division of Rate Counsel, filed January 7, 2007, January 30, 2007, and February 20, 2007.

Verizon New England Inc., Bell Atlantic Communications, Inc., NYNEX Long Distance Company, Verizon Select Services Inc. and FairPoint Communications, Inc. Joint Petition for Authority to Transfer Assets and Franchise to FairPoint Communications, Inc., New Hampshire Public Utilities Commission Docket No. DT-07-011, on behalf of the Office of Consumer Advocate, filed August 1, 2007, cross-examined November 1, 2007.

In the Matter of the Commission's Investigation into Verizon Maryland, Inc.'s Affiliate Relationships, Maryland Public Service Commission Case No. 9120, on behalf of the Office of People's Counsel, filed October 29, 2007 and November 19, 2007, cross-examined November 28, 2007.

In the Matter of the Board Investigation Regarding the Reclassification of Incumbent Local Exchange Carrier (ILEC) Services as Competitive, New Jersey Board of Public Utilities Docket No. TX07110873, on behalf of the New Jersey Division of Rate Counsel, filed December 14, 2007, January 10, 2008.

In the Matter of Verizon Washington, DC Inc.'s Price Cap Plan 2007 for the Provision of Local Telecommunications Services in the District of Columbia, Public Service Commission of the District of Columbia Formal Case No. 1057, on behalf of the District of Columbia Office of People's Counsel, filed December 20, 2007, January 31, 2008.

In re Possible Extension of Board Jurisdiction over Single Line Flat-Rated Residential and Business Rates for Local Exchange Carriers, Iowa Utilities Board Docket No. INU-08-1, on behalf of Iowa Office of Consumer Advocate, filed March 17, 2008, April 28, 2008, cross-examined May 22, 2008.

Petition of the Office of Consumer Counsel for Enforcement of Quality of Service Standards for the Southern New England Telephone Company d/b/a AT&T Connecticut, Connecticut Department of Public Utility Control Docket No. 08-07-15, on behalf of the Communications Workers of America, Local 1298, filed January 30, 2009, cross-examined February 25, 2009.

In the Matter of the Board's Investigation and Review of Local Exchange Carrier Intrastate Exchange Access Rates, New Jersey Board of Public Utilities Docket No. TX08090830, on behalf of the New Jersey Division of Rate Counsel, filed February 13, 2009, April 20, 2009, and June 22, 2009, cross-examined October 20, 2009.

In the Matter of Appropriate Forms Of Regulating Telephone Companies, Maryland Public Service Commission, Case No. 9133, on behalf of the Communications Workers of America, filed June 1, 2009, October 16, 2009, October 30, 2009, cross-examined November 4, 2009.

Petition of the Office of Consumer Counsel for Enforcement of Quality of Service Standards for the Southern New England Telephone Company d/b/a AT&T Connecticut, Connecticut Department of Public Utility Control Docket No. 08-07-15PH02, on behalf of the Communications Workers of America, Local 1298, filed September 21, 2009.

In the Matter of the Application of Frontier Communications Corporation, New Communications Holdings, Inc. and Verizon Communications Inc. for Consent and Approval of a Change in Control, Public Utilities Commission of Ohio Case No. 09-454-TP-ACO, on behalf of the Communications Workers of America and International Brotherhood of Electrical Workers, Local 986, filed October 14, 2009.

Frontier Communications Corporation, Verizon Communications, Inc., Verizon North Inc., Verizon South Inc., New Communications of the Carolinas, Inc. Joint Application for the approval of a Reorganization, Illinois Commerce Commission Docket No. 09-0268, on behalf of the International Brotherhood of Electrical Workers, Locals 21, 51, and 702, filed October 20, 2009.

In re Verizon Service Quality in Western Massachusetts, Massachusetts Department of Telecommunications and Cable D.T.C. 09-1, on behalf of the Office of the Attorney General, filed November 9, 2009, February 24, 2010, cross-examined March 31, 2010, April 1, 2010, May 21, 2010.

Joint Application of Frontier Communications Corporation and Verizon West Virginia Inc. and certain affiliates for approval of the transfer of Verizon's local exchange and long distance business in West Virginia to companies to be owned and controlled by Frontier Communications Corporation, Public Service Commission of West Virginia Case No. 09-0871-T-PC, on behalf of the Communications Workers of America, AFL-CIO, filed November 16, 2009.

In the Matter of Qwest Communications Company and CenturyTel, Inc. for Approval of Control of Qwest Communications Company LLC, New Jersey Board of Public Utilities Docket No. TM10050343, on behalf of the New Jersey Division of Rate Counsel, filed September 23, 2010.

Petition of the North American Numbering Plan Administrator on behalf of the Pennsylvania Telecommunications Industry for Approval of Numbering Plan Area Relief Planning for the 814 NPA, Pennsylvania Public Utility Commission Docket No. P-2009-2112925, on behalf of the Pennsylvania Office of Consumer Advocate, filed May 23, 2011, cross-examined May 24, 2011.

In re Applications of AT&T, Inc. and Deutsche Telekom AG for Consent to the Transfer of Control of the Licenses and Authorizations Held by T-Mobile USA, Inc. and its Subsidiaries to AT&T Inc., WT Docket No. 11-65, File Nos. 0004669383, *et al.*, sponsored declarations on behalf of the New Jersey Division of Rate Counsel, May 31, 2011, and June 20, 2011.

In the Matter of Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC For Consent To Assign Licenses and Application of Cellco Partnership d/b/a Verizon Wireless and Cox TMI Wireless, LLC For Consent To Assign Licenses, WT Docket No. 12-4, sponsored declarations on behalf of the New Jersey Division of Rate Counsel, filed February 17, 2012, and March 26, 2012.

In the Matter of the Board's Investigation Regarding the Reclassification of Incumbent Local Exchange Carrier (ILEC) Services as Competitive – Phase II, New Jersey Board of Public Utilities Docket No. TX11090570, on behalf of the New Jersey Division of Rate Counsel, filed February 24, 2012, April 27, 2012, and June 11, 2012, cross-examined July 17, 2012.

Petition of David K. Ebersole, Jr. and the Office of Consumer Advocate for a Declaratory Order that Verizon Pennsylvania Inc. Has Not Met Its Legal Obligation to the Greensburg Bona Fide Retail Request Group Pursuant to Its Chapter 30 Plan, Pennsylvania Public Utility Commission Docket No. P-2012-2323362, affidavit on behalf of the Pennsylvania Office of Consumer Advocate, September 6, 2012.

In the Matter of Commission Consideration Of Effective Competition Areas and the Classification of Basic Local Exchange Service, Colorado Public Utilities Commission Proceeding Number 13M-0422T, Pursuant to 4 CCR 723-2-2213, answer testimony on behalf of AARP, December 6, 2013, cross-examined January 7, 2014.

PURA Establishment of Rules for Electric Suppliers and EDCs Concerning Operations and Marketing in the Electric Retail Market, Connecticut Public Utilities Regulatory Authority Docket No. 13-07-18, testimony and supplemental testimony on behalf of the Connecticut Office of Consumer Counsel, initial and supplemental testimony (with Helen E. Golding), March 10, 2014 and March 17, 2014, cross-examined March 27, 2014.

Joint Application of Frontier Communications Corporation and AT&T Inc. for Approval of a Change in Control, Connecticut Public Utilities Regulatory Authority Docket No. 14-01-46, testimony on behalf of the Connecticut Office of Consumer Counsel, May 23, 2014, cross-examined June 30, 2014.

The Utility Reform Network, Complainant vs. Pacific Bell Telephone Company D/B/A AT&T California (U1001C); AT&T Communications of California, Inc. (U5002C), Defendants, California Public Utilities Commission Case No. 13-12-005, Complaint of the Utility Reform Network Regarding Basic Service Rates of AT&T California (Public Utilities Code Section 1702; Commission Rule of Practice and Procedure 4.1(b)), December 6, 2013, initial and rebuttal testimony on behalf of the Utility Reform Network (TURN), August 22, 2014 and October 3, 2014.

Joint Petition of Verizon Pennsylvania LLC and Verizon North LLC for Competitive Classification of all Retail Services in Certain Geographic Areas, and for a Waiver of Regulation for Competitive Services, Pennsylvania PUC Docket Nos. P-2014-2446303 and P-2014-2446304, direct and surrebuttal testimony on behalf of Communications Workers of America and the International Brotherhood of Electrical Workers, November 14, 2014, and December 12, 2014, cross-examined December 16, 2014.

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of Indirect Transfer of Control of Time Warner Cable Information Services (California), LLC, (U-68740-C); and The Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C) to Comcast Corporation, Pursuant to Public Utilities Code Section 854(A), Application No. 14-04-013 (filed April 11, 2014), initial and reply testimony on behalf of the Utility Reform Network (TURN), December 3, 2014 and December 10, 2014.

In the Matter of the Joint Application of Frontier Communications Corporation, Frontier Communications of America, Inc. (U 5429 C), Verizon California Inc. (U 1002 C), Verizon Long Distance, LLC (U 5732), and Newco West Holdings LLC for Approval of Transfer of Control Over Verizon California Inc. and Related Approval of Transfer of Assets and Certifications (Filed March 18, 2015), Application 15-03-005, reply and supplemental testimony on behalf of the Utility Reform Network (TURN), July 28, 2015 and September 11, 2015.

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, California Public Utilities Commission Investigation 15-11-007 (November 5, 2015), testimony on behalf of the Utility Reform Network (TURN), March 15, 2016, June 1, 2016 and July 15, 2016; participated in Expert Panel, July 20, 2016.

Pennsylvania Public Utility Commission Docket No. P-2015-2509336, Petition of Communications Workers of America for a Public, On-the-Record Commission Investigation of the Safety, Adequacy, and Reasonableness of Service Provided by Verizon Pennsylvania, LLC, direct testimony on behalf of Communications Workers of America, September 29, 2016.

Petition of the Maryland Office of People's Counsel for an Investigation into Verizon Maryland's Provision of Basic Local Phone Service Over Copper or Fiber Networks, affidavit on behalf of the Maryland Office of People's Counsel, January 13, 2017.

Iowa Utilities Board Docket No. INU-2016-0001, In re: Deregulation of Local Exchange Service, testimony on behalf of Office of Consumer Advocate, February 17, 2017 and April 21, 2017, cross-examined May 23, 2017.

New York Public Service Commission Case 16-C-0122, Proceeding on Motion of the Commission to Consider the Adequacy of Verizon New York Inc.'s Retail Service Quality Processes and Programs, testimony on behalf of the Communications Workers of America, March 24, 2017.

In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, Notice of Proposed Rulemaking, Notice of Inquiry, and Request for Comment, FCC Rcd 3266, (rel. Apr. 21, 2017), declaration on behalf of the National Association of State Utility Consumer Advocates, Maine Office of the Public Advocate, Maryland Office of People's Counsel ("OPC"), New Jersey Division of Rate Counsel, Office of the Ohio Consumers' Counsel, Pennsylvania Office of Consumer Advocate and The Utility Reform Network, June 15, 2017.

New Jersey Board of Public Utilities Docket No. ER 17030308, In the Matter of the Petition of Atlantic City Electric Company for Approval of Amendments to its Tariff to Provide For an Increase in Rates and Charges for Electric Service Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1, and for Other Appropriate Relief (2017), testimony on behalf of New Jersey Division of Rate Counsel, August 1, 2017.

Wyoming Public Service Commission Docket No. 700000-1644-TA-17, In the Matter of the Application of Qwest Corporation d/b/a CenturyLink QC for Determination that Basic Residential and Business Services Are Competitive Throughout All of CenturyLink QC's Zone 2 and Zone 3 Service Areas, testimony on behalf of AARP, November 15, 2017, cross-examined December 11, 2018.

Washington Utilities & Transportation Commission Docket UT-171082, CenturyLink's Obligations Under the Commission's Line Extension Rules, testimony on behalf of Public Counsel, June 1, 2018 and July 3, 2018.

New Jersey Board of Public Utilities Docket Nos. ER18010029 and GR18010030, In the Matter of the Petition of Public Service Electric and Gas Company for Approval of an Increase in Electric and Gas Rates and for Changes in the Tariffs for Electric and Gas Service, B.P.U.N.J. No. 16 Electric and B.P.U.N.J. No. 16 Gas, and for Changes in Depreciation Rates Pursuant to N.J.S.A. 48:2-18, N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1 and for Other Appropriate Relief, testimony on behalf of New Jersey Division of Rate Counsel, August 6, 2018.

Washington Utilities & Transportation Commission, Docket UT-180831, Rulemaking to Consider Possible Changes to Rules in Chapter 480-120 WAC, Relating to Service Obligations of Telephone Companies, assisted with the preparation of Comments of Public Counsel, December 7, 2018, participated in technical conference on behalf of Public Counsel, January 17, 2019.

In the Matter of the Petition of the Maryland Office of People's Counsel for an Investigation into Verizon Maryland's Provision of Basic Local Phone Service Over Copper or Fiber Networks - ML#210061, Report on behalf of Maryland Office of People's Counsel, February 8, 2019.

Connecticut Public Utilities Regulatory Authority Docket No. 18-06-02, Review of Feasibility, Costs, and Benefits of Placing Certain Customers on Standard Service Pursuant to Conn. Gen. Stat. § 16-245o(m), testimony on behalf of Connecticut Office of Consumer Counsel, February 27, 2019, cross-examined July 18, 2019.

New Mexico Public Regulation Commission Case No. 18-00295-UT, In the Matter of the Petition of CenturyLink CQ Regarding Effective Competition for Retail Residential Services, testimony on behalf of CWA, April 15, 2019, cross-examined September 25-26, 2019.

New Jersey Board of Public Utilities Docket No. ER19050552, In the Matter of the Verified Petition of Rockland Electric Company for Approval of Changes in Electric Rates, Its Tariff for Electric Service, and Its Depreciation Rates, and for Other Relief, testimony on behalf of New Jersey Division of Rate Counsel, October 11, 2019.

Washington Utilities and Transportation Commission Dockets UE-190529 and UG-190530 (Consolidated), Washington Utilities and Transportation Commission v. Puget Sound Energy, response testimony on behalf of Public Counsel, November 22, 2019.

Testimony before State Legislatures:

Testified on September 24, 1997, before the Massachusetts State Legislature Joint Committee on Government Regulations regarding House Bill 4937 (concerning area codes).

Testified on March 2, 2010, before the Maryland State Legislature Senate Finance Committee regarding Senate Bill 677 (concerning Telephone Landline Sale Bill).

Testified on March 11, 2010, before the Maryland State Legislature House Economic Matters Committee regarding House Bill 937 (concerning Telephone Landline Sale Bill).

Testified on June 25, 2013, on behalf of AARP, before the Ohio Select Committee on Telecommunications Regulatory Reform (regarding SB 162).

Testified on December 12, 2013, on behalf of AARP, before the Pennsylvania House Consumer Affairs Committee (regarding House Bill 1608).

Reports/Publications/Presentations

Expert reports in tax matters, reports and publications on telecommunications and energy policy in trade journals, and presentations at industry associations and conferences include the following:

Expert reports in tax matters:

Iowa Department of Inspections and Appeals, In the Matter of Cable One, Inc. v. Iowa Department of Revenue, DIA 10DORFC014, SBTR Nos. 899 and 903, Property Tax Assessment, Expert Report, January 21, 2011 (on behalf of the Iowa Department of Revenue), deposed February 9, 2011.

Level 3 Communications, LLC. v. Arizona Department of Revenue; Coshise County; Graham County; Greenlee County; La Paz County; Maricopa County; Mohave County; Pima Count, Pinal County and Yuma County, Superior Court of the State of Arizona in the Arizona Tax Court, No. TX-2007-000594, Expert Report, May 20, 2011 (on behalf of the Arizona Department of Revenue), deposed July 14, 2011; cross-examined August 24, 2012.

Bresnan Communications, LLC, Plaintiff, v. State of Montana Department of Revenue, Defendant, Cause No. DV-10-1312, July 5, 2011(on behalf of the Montana Department of Revenue), deposed July 29, 2011.

Verizon California Inc., Plaintiff, v. California Board of Equalization, Defendants, December 18, 2015 (on behalf of the California Board of Equalization), deposed January 20, 2016.

Reports and Publications:

“Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts, prepared for Massachusetts Attorney General’s Office, July 2019 Update.

“Residential energy supply market: Unmet promises and needed reforms” (with Frank A. Felder), *The Electricity Journal*, 32 (2019) 31–38.

“Maryland’s Residential Electric and Gas Supply Markets: Where Do We Go from Here?” (with Sarah M. Bosley), prepared for the Maryland Office of People’s Counsel, November 2018.

“Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts” (with Sarah M. Bosley), prepared for the Massachusetts Attorney General’s Office, March 29, 2018.

“The Cable-Telco Duopoly’s Deployment of New Jersey’s Information Infrastructure: Establishing Accountability” (with Sarah M. Bosley and Timothy E. Howington). Prepared for the Public Advocate of New Jersey, January 19, 2007.

“Assessing SBC/Pacific’s Progress in Eliminating Barriers to Entry: The Local Market in California Is Not Yet ‘Fully and Irreversibly Open’” (with Patricia D. Kravtin, Dr. Lee L. Selwyn, and Douglas S. Williams). Prepared for the California Association of Competitive Telecommunications Companies, July 2000.

“Where Have All the Numbers Gone? (Second Edition): Rescuing the North American Numbering Plan from Mismanagement and Premature Exhaust” (with Dr. Lee L. Selwyn). Prepared for the Ad Hoc Telecommunications Users Committee, June 2000.

“Price Cap Plan for USWC: Establishing Appropriate Price and Service Quality Incentives for Utah” (with Patricia D. Kravtin and Scott C. Lundquist). Prepared for the Utah Division of Public Utilities, March 22, 2000.

“Telephone Numbering: Establishing a Policy for the District of Columbia to Promote Economic Development” (with Douglas S. Williams and Sarah C. Bosley). Prepared for the District of Columbia Office of People’s Counsel, February 2000 (submitted to Eric W. Price, Deputy Mayor, April 6, 2000).

“The Use of Cost Proxy Models to Make Implicit Support Explicit, Assessing the BCPM and the Hatfield Model 3.1” (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, March 1997.

“The Use of Forward-Looking Economic Cost Proxy Models” (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC Docket No. CCB/CPB 97-2, February 1997.

“Continuing Evaluation of Cost Proxy Models for Sizing the Universal Service Fund, Analysis of the Similarities and Differences between the Hatfield Model and the BCM2” (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, October 1996.

“Converging on a Cost Proxy Model for Primary Line Basic Residential Service, A Blueprint for Designing a Competitively Neutral Universal Service Fund” (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, August 1996.

“The Phone Wars and How to Win Them” (with Helen E. Golding). *Planning*, July 1996 (Volume 62, Number 7).

“The BCM Debate, A Further Discussion” (with Dr. Lee L. Selwyn and Helen E. Golding). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, May 1996.

“The Cost of Universal Service, A Critical Assessment of the Benchmark Cost Model” (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, April 1996.

“Funding Universal Service: Maximizing Penetration and Efficiency in a Competitive Local Service Environment” (with Dr. Lee L. Selwyn). Prepared for Time Warner Communications, Inc., October 1995.

“A Balanced Telecommunications Infrastructure Plan for New York State” (with Dr. Lee L. Selwyn). Prepared for the New York User Parties, December 4, 1992.

“A Roadmap to the Information Age: Defining a Rational Telecommunications Plan for Connecticut” (with Dr. Lee L. Selwyn, Susan M. Gately, JoAnn S. Hanson, David N. Townsend, and Scott C. Lundquist). Prepared for the Connecticut Office of Consumer Counsel, October 30, 1992.

“ISDN Rate-Setting in Massachusetts.” *Business Communications Review*, June 1992 (Volume 22, No. 6).

“Analysis of Local Exchange Carrier April 1988 Bypass Data Submissions” (with William P. Montgomery and Dr. Lee L. Selwyn). Prepared for the National Association of State Utility Consumer Advocates, August 1988.

“Tariff Data is Critical to Network Management.” *Telecommunications Products and Technology*, May 1988 (Volume 6, No. 5).

“Strategic Planning for Corporate Telecommunications in the Post-Divestiture Era: A Five Year View” (with Dr. Lee L. Selwyn, William P. Montgomery, and David N. Townsend). Report to the International Communications Association, December 1986.

“Competitive Pricing Analysis of Interstate Private Line Services.” Prepared for the National Telecommunications Network, June 1986.

“Analysis of Diamond State Telephone Private Line Pricing Movements: 1980-1990.” Prepared for Network Strategies, Inc., April 1985.

“Analysis of New York Telephone Private Line Pricing Movements: 1980-1990.” Prepared for Network Strategies, Inc., February 1985.

“Auction Methods for the Strategic Petroleum Reserve” (With Steven Kelman and Richard Innes). Prepared for Harvard University Energy Security Program, July 1983.

“How Two New England Cities Got a \$100 Million Waste-to-Energy Project” (with Diane Schwartz). *Planning*, March 1983 (Volume 49, Number 3).

“Evaluation of Economic Development and Energy Program in Lawrence, Massachusetts.” (with Richard Innes). Prepared for U.S. Department of Energy, August, 1982.

“Energy Efficiency in New England’s Rental Housing.” New England Regional Commission, 1981.

“Low Level Radioactive Waste Management in New England.” New England Regional Commission, 1981.

“The Realtor's Guide to Residential Energy Efficiency.” Prepared for the U.S. Department of Energy and the National Association of Realtors, 1980.

Presentations:

“Telecom Committee Panel: Like the Phoenix, Telecommunication Service Quality Issues are Rising Again,” National Association of State Utility Consumer Advocates Annual Meeting, San Antonio, Texas, November 19, 2019.

“Retail Supplier Abuses and High Prices for Consumers: Does Retail Choice Still Make Sense?” 2019 National Association of State Utility Consumer Advocates Mid-Year Meeting, Portland, Oregon, June 21, 2019.

“The Battle for Net Neutrality,” lecture in “Methods of Policy Analysis,” MIT Department of Urban Studies & Planning, May 7, 2018.

“Discussion of Massachusetts Report,” Presentation to Nevada Governor’s Committee on Energy Choice, Technical Working Group on Consumer Protection, April 20, 2018.

“Back to Basics: What Specific Consumer Protections Are Still Needed in Telecommunications Regulation?,” Presentation at the Mid-Atlantic Conference of Regulatory Utilities Commissioners 21st Annual Education Conference, Williamsburg, Virginia, June 23, 2016.

“The Three Rs: The Need for Reliable, Redundant and Resilient Telecommunications in the New Age,” 2015 National Association of State Utility Consumer Advocates Annual Meeting, Austin, Texas, November 9, 2015.

“Telecommunications in Transition: Advocating for 50+ Consumers in the Brave New World,” Presentation at AARP’s State Advocacy and Strategy Integration conference on “State Regulatory and Legislative Landscapes,” Portland, Oregon, September 16, 2014.

“What the IP Transition Means for Consumers and a Ubiquitous, Affordable, Reliable National Communications System,” 2014 National Association of State Utility Consumer Advocates Mid-Year Meeting, Santa Fe, New Mexico, June 2, 2014.

“For Sale - The National Wireline Communications System,” 2014 National Association of State Utility Consumer Advocates Mid-Year Meeting, Santa Fe, New Mexico, June 3, 2014.

“FCC Review of Verizon’s Section 214 Application and Its Implications for the IP Transition,” NASUCA Annual Meeting, Orlando, Florida, November 19, 2013.

“What gets lost in the IP Transition?” NASUCA Annual Meeting, Orlando, Florida, November 18, 2013.

“Service Outage and Restoration,” NARUC Staff panel, NARUC 125th Annual Meeting, Orlando, Florida, November 16, 2013.

“You Don’t Know What You’ve Got Til It’s Gone – Utilities Consumer Protections,” Presentation at AARP’s State Advocacy and Strategy Integration conference on “Fighting for Consumers,” Minneapolis, Minnesota, September 19, 2013.

“Protecting Consumers’ Assets and Income,” Presentation at the National Association of Latino Elected and Appointed Officials Policy Institute on “The Changing Dynamics of the Latino 50+ Population,” Albuquerque, New Mexico, August 25, 2013.

“Federalism in the 21st Century,” Presentation at the Mid-Atlantic Conference of Regulatory Utilities Commissioners 18th Annual Education Conference, Hershey, Pennsylvania, June 24, 2013.

“Trials for the Transition from TDM to IP,” Presentation at the New England Conference of Public

Utilities Commissioners 66th Annual Symposium, Groton, Connecticut, June 11, 2013.

“The 1996 Telecom Act Today: Universal, affordable, reliable access to telecommunications for all. Does the federal-state partnership still exist?” AARP Telecommunications Summit, Pew Center for Charitable Trusts, Washington, DC, July 18, 2012.

“Issues and Ramifications Arising From the FCC’s Connect America Fund Order Affecting High Cost Universal Service and Intercarrier Compensation,” 2012 National Association of State Utility Consumer Advocates Mid-Year Meeting, Charleston, South Carolina, June 24, 2012.

“FCC Lifeline/Link Up Reform Order – What will it mean for regulators, consumers, and companies?” Presentation at the Mid-America Regulatory Conference, Des Moines, Iowa, June 11, 2012.

“Improving the Separations Process: Consumer Impact,” panelist for Federal-State Joint Board on Separations on behalf of the National Association of State Utility Consumer Advocates and the New Jersey Division of Rate Counsel, September 24, 2010, CC Docket No. 80-286, Washington, DC.

“The Evolving Role of State Regulation in a Changing Industry,” Presentation at the New England Conference of Public Utilities Commissioners 63th Annual Symposium, Brewster, Massachusetts, May 17, 2010.

“Broadband: Where it is, where it ain’t, and where it oughta be,” June 29, 2009, National Association of State Utility Consumer Advocates Mid-Year Meeting, Boston, Massachusetts.

“Deregulation and Price Increases: The Hallmarks of a Competitive Market?” November 18, 2008; 2008 National Association of State Utility Consumer Advocates Annual Meeting, New Orleans, Louisiana.

“Forbearance: What is it? What’s wrong with it? How to fix it,” November 12, 2007; “Net Neutrality – Not Dead Yet!,” November 13, 2007; 2007 National Association of State Utility Consumer Advocates Annual Meeting, Anaheim, California.

“FCC’s Regulatory Stance – Consumer Advocates’ Role More Important Than Ever,” 2005 National Association of State Utility Consumer Advocates Winter Meeting, March 2, 2005, Washington, D.C.

“Impact of Federal Regulatory Developments on Consumers and Consumers’ Impact on Regulatory Developments,” Presentation for the Washington Attorney General’s Office, Seattle, Washington, May 27, 2003.

“The Finances of Local Competition” Presentation at the New England Conference of Public Utilities Commissioners 54th Annual Symposium, Mystic, Connecticut, May 21, 2001.

“Facilities-Based Competition” Presentation at the New England Conference of Public Utilities Commissioners 52nd Annual Symposium, Bretton Woods, New Hampshire, May 24, 1999.

“Exploring Solutions for Number Exhaust on the State Level” and “A Forum for Clarification and Dialogue on Numbering Ideas,” ICM Conference on Number Resource Optimization, New Orleans, Louisiana, December 10-11, 1998.

“Telecommunications Mergers: Impact on Consumers,” AARP Legislative Council 1998 Roundtable Meeting, Washington, D.C., November 18, 1998.

“Consumer Perspectives on Incumbent Local Exchange Carrier Mergers,” National Association of Regulatory Utility Commissioners 110th Annual Convention, Orlando, Florida, November 11, 1998.

Federal Communications Commission En Banc Hearing on “Proposals to Revised the Methodology for Determining Universal Service Support,” CC Docket Nos. 96-45 and 97-160,” June 8, 1998, panelist.

“Universal Service: Real World Applications,” 1997 National Association of State Utility Consumer Advocates Mid-Year Meeting, Charleston, South Carolina, June 9, 1997.

“Modeling operating and support expenses” and “Modeling capital expenses,” panelist for Federal-State Joint Board on Universal Service Staff Workshops on Proxy Cost Models, January 14-15, 1997, CC Docket 96-45.

“Evaluating the BCM2: An Assessment of Its Strengths and Weaknesses,” presentation to the AT&T Cost Team (with Michael J. DeWinter), December 4, 1996.

“Interpreting the Telecommunications Act of 1996 Mandate for the Deployment of Advanced Telecommunications Services in a Fiscally Responsible and Fully Informed Manner” (with Helen E. Golding), *Proceedings of the Tenth NARUC Biennial Regulatory Information Conference*, Volume 3, September 11-13, 1996.

“Making Adjustments to the BCM2.” Presentation to the Staff of the Federal-State Joint Board on Universal Service, September 16, 1996.

“Converging on a Model: An Examination of Updated Benchmark Cost Models and their Use in Support of Universal Service Funding.” Presentation to the National Association of Regulatory Utility Commissioners Summer Committee Meetings, July 22, 1996.

“ETI's Corrections to and Sensitivity Analyses of the Benchmark Cost Model.” Presentation to the Staff of the Federal-State Joint Board on Universal Service,” May 30, 1996.

“Redefining Universal Service.” Presentation at the *Telecommunications Reports* conference on “Redefining Universal Service for a Future Competitive Environment,” Washington, D.C., January 18, 1996.

“Funding Universal Service: Maximizing Penetration and Efficiency in a Competitive Local Service Environment,” (with Lee L. Selwyn, under the direction of Donald Shephard), a Time Warner Communications Policy White Paper, September 1995.

“Stranded Investment and the New Regulatory Bargain,” (with Lee L. Selwyn, under the direction of Donald Shephard), a Time Warner Communications Policy White Paper, September 1995.

“New Frontiers in Regulation.” Presentation to the New England Women Economists Association, December 12, 1995.

“Local Cable and Telco Markets.” Presentation at the New England Conference of Public Utilities Commissioners 46th Annual Symposium, Dixville Notch, New Hampshire, June 29, 1993.

“Relationship of Depreciation to State Infrastructure Modernization.” Presentation at the *Telecommunications Reports* conference on “Telecommunications Depreciation,” Washington, D.C., May 6, 1993.

“Crafting a Rational Path to the Information Age.” Presentation at the State of New Hampshire's conference on the “Twenty-First Century Telecommunications Infrastructure,” Durham, New Hampshire, April 1993.

“The Political Economics of ISDN,” presentation at the John F. Kennedy School of Government seminar on “Getting from Here to There: Building an Information Infrastructure in Massachusetts,” March 1993.

“The New Competitive Landscape: Collocation in Massachusetts.” Presentation at TeleStrategies Conference on Local Exchange Competition, Washington, D.C., November 1991.

“Telecommunications Policy Developments in Massachusetts.” Presentations to the Boston Area Telecommunications Association, October 1989; March 1990; November 1990; June 1992. Presentation to the New England Telecommunications Association, March 1990.

“How to Capitalize on the New Tariffs.” Presentation at Communications Managers Association conference, 1988.

Advisor to:

United States General Accounting Office Report to the Subcommittee on Antitrust, Business Rights and Competition, Committee on the Judiciary, U.S. Senate, *Characteristics and Competitiveness of the Internet Backbone Market*, GAO-02-16, October 2001.

Attachment B

Statement of Qualifications

HELEN E. GOLDING

Helen E. Golding has worked for forty years in the field of utility regulation and public policy. Much of Ms. Golding's work in recent years has focused on industry structure and the effects of competition and evolving technologies, including work on behalf of consumer advocates on legislative and regulatory initiatives related to the deployment of new technologies, deregulation, and the preservation of safe, reliable, and affordable service for all consumers. She has a broad understanding of the issues confronting regulators and stakeholders, having analyzed these issues from the diverse (although frequently overlapping) perspectives of residential consumers, small/medium/large business customers, and competitive providers.

As Vice President at Economics and Technology, Inc. from 1994 to 2011, Ms. Golding had a wide-ranging practice that involved traditional regulatory issues (such as rate setting, rate design, universal service, affiliate transactions, and quality of service), mergers and acquisitions, antitrust, and a host of issues arising from competition, deregulation, and the evolution of new technologies and the Internet. She is currently an independent consultant. In addition to work in state and federal regulatory proceedings in the US, Ms. Golding has also provided consulting services to AT&T Canada and MTS Allstream in proceedings before the Canadian Radio-television and Telecommunications Commission. Ms. Golding has served as an expert witness on matters relating to the taxation of telecommunications and information services in court proceedings in Pennsylvania and Massachusetts.

Although most of Ms. Golding's work has involved the telecommunications industry, similar issues arise in other industries where changes in market structure and regulation create new challenges for consumer protection. Ms. Golding has participated in investigations in several states concerning the marketing and billing practices of competitive retail electric suppliers and their consequences for consumers.

As Assistant General Counsel of the Massachusetts Department of Public Utilities from November 1988 to September 1992 (including an interval as Acting General Counsel), Ms. Golding served as the DPU's chief legal advisor and managed a staff of hearing officers who conducted adjudicatory and rulemaking proceedings for all regulated utilities. Her position also required case management and policy coordination with the Department's industry section divisions. In addition to rate cases, these proceedings included the tariffing of new services, design of conservation and load management programs, incentive and competitive rates, licensing, financing, siting and utility management practices.

From 1992-3, Ms. Golding was in the Regulatory Practice Group at Rubin and Rudman, a mid-sized Boston law firm, where she specialized in communications, energy, and municipal law for clients that included communications and cable companies, municipal electric companies, independent power producers, and public authorities.

Prior to becoming Assistant General Counsel at the DPU, Ms. Golding was Regulatory Counsel and Manager of Telecommunications Public Policy for Honeywell, Inc., providing legal and strategic planning advice concerning rate and regulatory developments affecting the company as a large user of telecommunications service and as a computer manufacturer. In that position, she also provided counsel on tariff and regulatory matters to the company's alarm and customer premises equipment businesses.

Early in her career, Ms. Golding worked at the Federal Communications Commission, as a General Attorney in the Common Carrier Bureau, where she was responsible for tariff review and rulemaking proceedings for domestic and international telecommunications services, and in the Telecommunications

Division of the Massachusetts Department of Public Utilities, where, among other things, she drafted the state's first regulations for radio common carriers and cable pole attachments.

Ms. Golding is a graduate of Boston University School of Law (J.D., 1977 and Bryn Mawr College (A.B. *cum laude*, 1974).