# **Committee on Energy and Commerce** U.S. House of Representatives Witness Disclosure Requirement - "Truth in Testimony"

Required by House Rule XI, Clause 2(g)(5)

1.	Your Name: James W. Stegeman						
2.	Your Title: President						
3.	The Entity(ies) You are Representing: CostQuest Associates, Inc.						
4.	Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	No X				
5.	Please list any Federal grants or contracts, or contracts or payments of a foreign government, that you or the entity(ies) you represent have reafter January 1, 2015. Only grants, contracts, or payments related to t matter of the hearing must be listed.	ment, that you or the entity(ies) you represent have received on or 2015. Only grants, contracts, or payments related to the subject					
	Not sure this is pertinent, but we currently are under contract with the Univ Administration Company for the development, maintenance, and support of America Cost Model used to determine the disbursements to broadband pro	f the Co					
6.	Please attach your curriculum vitae to your completed disclosure form	•					

Date:\_03/17/2017\_\_\_\_\_

Signature:\_

## INSTRUCTIONS FOR COMPLETING THE TRUTH-IN-TESTIMONY DISCLOSURE FORM

*In General.* The attached form is intended to assist witnesses appearing before the Committee on Energy and Commerce in complying with Rule XI, clause 2(g)(5) of the Rules of the House of Representatives, which provides:

(B) In the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include a curriculum vitae and a disclosure of any Federal grants or contracts, or contracts or payments originating with a foreign government, received during the current calendar year or either of the two previous calendar years by the witness or by an entity represented by the witness and related to the subject matter of the hearing. (C) The disclosure referred to in subdivision (B) shall include (i) the amount and source of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) related to the subject matter of the hearing; and (ii) the amount and country of origin of any payment or contract related to the subject matter of the hearing originating with a foreign government. (D) Such statements, with appropriate redactions to protect the privacy or security of the witness, shall be made publicly available in electronic form not later than one day after the witness appears.

## Please complete the form in accordance with these directions.

- 1. *Name, Title, Entity(ies) (Items 1-3 on the form).* Please provide the name and title of the witness and the entity(ies) on whose behalf the witness is testifying.
- 2. Governmental Entity (Item 4). Please check the box indicating whether or not the witness is testifying on behalf of a government entity, such as a Federal department or agency, or a State or local department, agency, or jurisdiction. Trade or professional associations of public officials are not considered to be governmental organizations.
  - Grants and Contracts (Item 5). Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2015. For each Federal grant (or subgrant thereof) or contract (or subcontract thereof) related to the subject matter of the hearing, please include the amount and source of each. For each payment or contract originating with a foreign government related to the subject matter of the hearing, please include the amount and country of origin of each. Only grants, contracts, or payments related to the subject matter of the hearing must be listed.
- 3. *Curriculum Vitae (Item 6)*. Please attach your CV to your completed disclosure form.
- 4. **Submission.** Please sign and date the form in the appropriate place. Please submit this form with your written testimony. Please note that under the Committee's rules, copies of a written statement of your proposed testimony must be submitted before the commencement of the hearing. To the greatest extent practicable, please also provide a copy in electronic format according to the Electronic Format Guidelines that accompany these instructions.

## James W. Stegeman

Education: BS - Miami University (Mathematics and Statistics)

MS - Miami University (Statistics)

Mr. James Stegeman is the President of CostQuest Associates, Inc. As an Executive of the company, Mr. Stegeman has total responsibility for the company (P&L, staffing, strategic plan, etc.). In addition to this role, Mr. Stegeman leads the product development for the company.

Mr. Stegeman formed CostQuest Associates, Inc. in 1999. Prior to CostQuest, Mr. Stegeman worked in a variety of positions at INDETEC International, the last of which was Executive Vice-President. He joined INDETEC in 1995. Prior to INDETEC, he spent 7 years in a variety of Financial and Regulatory management positions with Cincinnati Bell Telephone.

Mr. Stegeman has been a major force behind the development of the latest generation network cost models used by wireline and wireless companies and state and government agencies in support of broadband deployment analysis (telco, cable, wireless and satellite), valuation, and UNE (Unbundled Network Element) and USF (Universal Service Fund) proceedings. He led the design, coding and implementation of the Connect America Cost Model ("CAM", "CACM", "A-CAM") that is being used by the FCC to develop and disburse the funding of broadband deployment. He led the design, coding and implementation of the GigabitCity model that is currently being used by investment banking entities, cities and carriers to investigate the financials for fiber deployment. He led the design, coding and implementation of the Broadband Analysis Model ("BAM") that was used by the FCC to develop and support the economic findings in the National Broadband Plan. He led the design, coding and implementation of the CostQuest Broadband Analysis Tool ("CQBAT") that was filed by the 5 largest landline US based telecom companies at the FCC to develop and support the FCC's Universal Service revamp. He led the design, coding and implementation of the CostProWyoming model currently in use in Wyoming to estimate the cost of broadband deployment. He designed, coded and implemented the Cost Proxy Model (CPM) currently in use in California for universal service support determination. He led the design, coding and implementation of the Benchmark Cost Proxy Model (BCPM) used for universal service support determination. He led the design and development of the CostPro model designed to support USO and UNE costing and tax valuation efforts. CostPro has been used by multiple state commissions and tax entities and is in use by multiple carriers with operations all 50 states. This model incorporates geocoded customer locations, road networks, engineering rules, and unique algorithms to design a truly forward-looking communications network.

In addition to his U.S. network model experience, Mr. Stegeman has also designed the Universal Service Cost model adopted for use in Hong Kong. He also led the development of the Australian Universal Service Cost model, and he was retained to assist in the development of similar costing models in Japan. And, he led the effort to create the core network model for New Zealand's USF proceedings. This New Zealand model has been referred to as a "best-in-class TSLRIC model" by an independent outside party.

In concert with his experience in building network models, Mr. Stegeman has been retained as an expert witness in various regulatory proceedings to attest to the validity of network models for supporting UNE and USF costing.

Mr. Stegeman is also well aware of costing and costing methods and their application to business needs. He has designed, coded and implemented various business case, product profitability and customer profitability models in use throughout the world. This approach brings the economic costs into real

businesses decisions by joining the cost information with the product demand and revenues. Mr. Stegeman has also developed and reviewed regulatory accounting models. These models separate the costs of a company typically for federal rate making purposes. Finally, Mr. Stegeman has also been retained to assist in the development of concepts, analysis and methods for Universal Service, Unbundled Network Element, Interconnection, and Access costing in numerous countries.

## Experience:

### CostQuest Associates:

(1999-present)

**Executive Management-** As President, have total responsibility for the company (P&L, staffing, strategic plan, etc.).

**Product Development and Support** – Direct the continued development, implementation and support of products related to CostQuest's core competencies in cost, profitability, demand analysis, public policy and regulatory strategy.

**Broadband Economic Modeling** – Retained by the FCC to develop the economic model to support the National Broadband Plan that was delivered to Congress in March, 2010. The effort developed an economic model to derive the business case of deploying broadband across the U.S., including the capital, operational costs and the potential revenues. A key component of this modeling effort was the use of output from our CostPro models, and CostPro provided key attributes about the network requirements.

**Broadband Mapping** – Engaged to design and develop detailed broadband mapping inventory. Effort captured broadband service areas and gaps within a state. Effort also developed the cost to deploy broadband in identified gap areas. Technologies included: Cable, Telco, and Fixed Wireless. Results have been used to aid the continued rollout of broadband in the state. Efforts have been widely publicized and presented to numerous parties. States studies conducted in include:

- Wyoming
- Alabama
- Wisconsin
- Idaho

**Product Profitability Models** - Engaged to design and develop sophisticated decision support and product contribution measurement system, activity based management capability, and competitive analysis and response tools for the communications companies.

**Communication Business Case Models** - Engaged to design and develop sophisticated business case model to determine whether a CLEC could operate with a positive net present value without access to incumbent local exchange carrier leased switching. Model used primarily in FCC TRO proceedings.

Network Cost/Valuation Models and Trends – Led the design, development, and deployment of the world's leading network loop, cable and wireless economic models (including Broadband models). Models use geocoded data along with minimum spanning road trees to develop the most realistic forward looking cost model to date. Model has been filed in numerous states and has been accepted in all states it has been filed in. Models have been used for USF and UNE proceedings, tax valuation, corporate valuation, business case analysis, and pricing. In addition to models, have led the development of industry price and replacement cost new trends for the wireless and cable industry. Clients include:

- FCC
- Sanford-Bernstein
- USTelecom
- Verizon
- AT&T

- BellSouth Telecommunications
- Consolidated Communications
- CenturyLink
- Fairpoint
- Frontier
- Alltel
- Embarq
- Windstream
- Hawaiian Telcom
- Bermuda Telecom
- Logic
- Western Wireless
- Cincinnati Bell
- State of Wyoming
- Iowa Telecom
- CTIA
- US Cellular
- MetroPCS
- TMobile
- Commerce Commission of New Zealand
- InSite Wireless
- American Tower
- Crown Castle
- State of New York
- City of San Francisco

**USO Cost Models -** engaged to design, develop, support and witness to sophisticated total cost of service econometric proxy model for use in determining universal service obligation (USO) and competitive analytic response capability. These include models currently in use in the following areas:

- CAM (design, develop, support being used by the FCC as the national platform for funding broadband deployment)
- Cost Proxy Model (design, develop, support accepted and in use in California)
- Benchmark Cost Proxy Model (design, develop, support, witness accepted in several states)
- Synthesis Model (support use and witnessing)

**State Grant Reviews -** engaged to review, on behalf of government entities, requests for grant funding of telecommunication networks.

**GAAP Depreciation Studies -** engaged to develop the average remaining lives and depreciation rates for GAAP purposes. Studies have been audited for use.

**Witness** – Have witnessed in a number of state proceedings:

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- Florida, Virginia, Oklahoma, Utah, California, Wisconsin Loop Modeling and UNEs
- Florida, South Carolina, Georgia, Alabama, North Carolina, Kentucky, and Mississippi *TRO*
- Florida and Georgia

Universal Service

- Florida and Georgia
- FCC En-banc

**Speaker -** Have been an invited speaker at numerous events:

- Consumer Electronics Show
- WTA Annual Conference (repeat presenter)
- NCTA Annual Finance Conference
- Technology Futures Inc. annual conference (repeat presenter)
- FCC En-banc proceeding
- NARUC Conferences (repeat presenter)
- Wichita State AdValorem Conference (repeat presenter)
- University of Florida PURC (repeat presenter)
- Columbia SUNY Broadband Conference
- FCC (repeat presenter)
- CostQuest Annual Telecom Economics Seminar
- Montana Telecommunications Forum
- Wyoming Telecommunications Forum

**Papers -** Have filed research documents and papers in various venues:

- FCC En-banc proceeding
- NARUC (numerous)
- FCC covering USF, UNE, Auctions and Modeling

### **INDETEC International:**

(1995-1999)

**Executive Management-** As an Executive of the company, had total responsibility for the INDETEC division (P&L, staffing, strategic plan, etc..).

**Product Development and Support** – As Senior Vice President and executive of the INDETEC, directed the continued development, implementation and support of products related to INDETEC's core competencies in cost, profitability, demand analysis, public policy and regulatory strategy.

**Product Profitability Models** - Engaged to design and develop sophisticated decision support and product contribution measurement system, activity based management capability, and competitive analysis and response tools for the following telecommunications companies:

- Cincinnati Bell Telephone
- Citizens Telecom
- Hong Kong Telecom;

**USO Cost Proxy Models -** engaged to design and develop sophisticated total cost of service econometric proxy model for use in determining universal service obligation (USO) and competitive analytic response capability. These include models currently in use or under consideration in the following areas:

- Hong Kong (accepted and in use)
- Cost Proxy Model (accepted and in use in California)
- Bench Mark Cost Proxy Model (accepted in several states)
- Australia Net Universal Service Cost (NUSC) model (accepted and in use)

**Customer Profitability Model -** engaged to design and develop sophisticated model for use in the cost and/or profitability of a customer and competitive analytic response capability for the following telecommunications companies:

- Hong Kong Telecom;
- Pacific Bell.

#### Cincinnati Bell Telephone:

**Financial Planning Analyst** - responsible for developing product process costs in relation to new corporate organizational and management structure; performed financial analyses associated with strategic regulatory initiatives, product entry/exit decisions, and economic and strategic impact of potential management decisions.

**Supervisor, Management Cost** - responsible for developing a hybrid management accounting system combining Economic Value Added (EVA) and Activity Based Management (ABM) practices. Developed regulatory cost and earnings model and statistical methodology for determining revenue requirement.

## Specific Experience as an Expert Witness:

State / Entity			Stadoman Wit	noss/Tostimony Appearances *	
	Docket	Year		ness/Testimony Appearances *  Description	Role
State / Ellity	Docket	rear	Туре	Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s	Kole
Alabama	27821	2000/2001	UNE	Interconnection Services, Unbundled Network Elements and other Related Services	Witness on Modeling
Alabama	29054-Phase 2	2004	TRO	Implementation of the Federal Communications Commission's Triennial Review Order (Phase II - Local Switching for Mass Market Customers	Witness on Modeling
				Described Books are and Control November 2007 Tooks and in Colifornia, and with Chata Bound	
California	2008-2013 AT&T Tax Filings	2008-2014	Tax	Provided Replacement Cost New of the AT&T network in California - met with State Board of Equalization members in 2008, staff members in 2008-2013	Witness on RCN
				Provided Replacement Cost New of the Verizons network in California - met with staff	
California	2007-2014 Verizon Landline Tax Filings	2009-2014	Tax	members in 2009-2014	Witness on RCN
				Met with State Department of Revenue to discuss CostQuest Trend Factors for cable	
Colorado	2014 Trending Factors	2014	Tax	industry	Witness on Trend Factors
	-				
Florida	990649-TP	2000-2002	UNE	Inquiry into the pricing of unbundled network elements	Witness on Modeling
El-sid-	0 TD		TRO	Implementation of requirements arising from FCC's triennial UNE review: Local Circuit	Mariana and Mariantina
Florida Florida	030851-TP 2010 Comcast Miami-Dade Tax Valuation	2003	Tax	Switching for Mass Market Customers Provided Replacment Cost New of the Comcast Miami-Dade HFC network	Witness on Modeling Witness on RCN
Florida	2010 Conicast Miami-Dade Tax Valuation	2012	Tax	Provided Replacment Cost New of the Comcast Miami-Dade HFC network	Witness on RCN
Florida	2014 Comcast West Palm Beach Tax Valuation	2012	Tax	Provided Replacment Cost New of the Comcast Miami Palm Beach HFC network	Witness on RCN
riorida	2014 Conicast West Fain Beach Tax Valuation	2015	IdA	Frovided Replacifient Cost New of the Comcast Wildlin Failif Deadl Fire Thetwork	Withess Off NCIV
Georgia	5825-U	2000	Universal Service	Describe the the Synthesis Model ("SM") (the version released on November 2, 1999 and briefly review the workings of the model FCC's universal service model	Witness on Modeling
				Review of Cost Studies Methodologies Pricing Policies and Cost Based Rates for	
Georgia	14361-U	2001-2004	UNE	Interconnection and Unbundling of BellSouth Telecommunications Services	Witness on Modeling
Ceorgia	17740-11	2004	TRO	FCC's Triennial Review Order Regarding the Impairment of Local Switching for Mass Market Customers	Witness on Modeling
Georgia Georgia	17749-U 2013 and 2014 AT&T Tax Proceeding	2004	Tax	Provided Replacment Cost New of AT&T network	Witness on Modeling Witness on RCN
Georgia	AT&T Dekalb County Tax Proceeding	2015/2017	Tax	Provided Replacment Cost New of AT&T Methods Provided Replacment Cost New of AT&T Mobility network	Witness on RCN
Georgia	AT&T Cobb County Tax Proceeding	2016	Tax	Provided Replacment Cost New of AT&T Mobility Network	Witness on RCN
0				appearance and a second most of recording	Access accessed
lowa	2009	2009	Interconnection	Proceeding to determine cost for interconnection	Witness on Modeling
					Expert on RCNLD and
lowa	2013/2014	2015	Tax	Provided presentation on RCNLD and obsolescence measures for Iowa Telecom properties	Obsolesence adjustments
Kontuclu	AC282	2000 2004	UNE	Inquiry into the Development of Degrees and Pates for Unbrindled Network Florents	Mitness on Madeling
Kentucky	AC382	2000-2001	UNE	Inquiry into the Development of Deaveraged Rates for Unbundled Network Elements Review of FCC Trienniel Review Order re unbundling requirements for Individual Network	Witness on Modeling
Kentucky	2003-00379	2004	TRO	Elements	Witness on Modeling
				Final Deaveraging of BellSouth Telecommunications, Inc., UNE Rates pursuant to FCC CC	
				96-45 9th Report and Order on 18th Order on Reconsideration released 11/2/99 to be	
Louisianna	U-24714 (SUBDOCKET A)	2000-2001	UNE	established and submitted for the December Louisiana Public Service Commission Business	
		2000-2001	UNE	and Executive Session.	Witness on Modeling
		2000-2001	UNE		Witness on Modeling
	2013 Universal Service	2013/2014	Universal Service	Provided Universal Service model for state proceeding. Provided workshop to Public	Witness on Modeling Witness on Modeling
				Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.	
Maine	2013 Universal Service	2013/2014	Universal Service	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s	Witness on Modeling
Maine				Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.	
Maine Mississippii	2013 Universal Service 2000-UA-999	2013/2014	Universal Service	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services	Witness on Modeling Witness on Modeling
Maine Mississippii North Carolina	2013 Universal Service 2000-UA-999 P-100. SUB 133d	2013/2014 2000-2001	Universal Service  UNE  UNE	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements	Witness on Modeling Witness on Modeling Witness on Modeling
Maine Mississippii North Carolina North Carolina	2013 Universal Service 2000-UA-999 P-100, SUB 133d P-100, Sub 133Q	2013/2014 2000-2001 2002 2004	Universal Service  UNE  UNE  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina  North Carolina  North Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding	2013/2014 2000-2001 2002 2004 2012	Universal Service  UNE  UNE  TRO  Tax	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina  North Carolina  North Carolina	2013 Universal Service 2000-UA-999 P-100, SUB 133d P-100, Sub 133Q	2013/2014 2000-2001 2002 2004	Universal Service  UNE  UNE  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina  North Carolina  North Carolina  North Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013	Universal Service  UNE  UNE  TRO  Tax	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN
Maine  Mississippii  North Carolina  North Carolina  North Carolina  North Carolina  Ootth Carolina	2013 Universal Service 2000-UA-999 P-100, SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation	2013/2014 2000-2001 2002 2004 2012	Universal Service  UNE  UNE  TRO  Tax	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina  North Carolina  North Carolina  North Carolina  Ootth Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation 2011 AT&T Tax Proceeding	2000-2001 2002 2004 2012 2013	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina North Carolina Oklahoma Oklahoma	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing	2000-2001 2002 2004 2012 2013	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  Tax	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s	Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN
Maine  Mississippii  North Carolina  North Carolina  North Carolina  North Carolina  Oklahoma  Oklahoma  South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d  P-100, Sub 133Q  2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing	2003/2014 2000-2001 2002 2004 2012 2013 2011 2013	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  UNE  UNE	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P Provided workshop on AT&T Mobility RCN Provided RCN for Towers in Wake county  Deposed as witness for RCN study. Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services	Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina  North Carolina  North Carolina  North Carolina  Oklahoma  Oklahoma  South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing	2002-2004 2002-2004 2012-2013 2011-2013	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  Tax	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s	Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN
Maine  Mississippii  North Carolina  North Carolina  North Carolina  North Carolina  Oklahoma  Oklahoma  Oklahoma	2013 Universal Service  2000-UA-999  P-100. SUB 133d  P-100, Sub 133Q  2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing	2003/2014 2000-2001 2002 2004 2012 2013 2011 2013	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  UNE  UNE	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability Of Unbundled Local Switching For The Mass Market	Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  TRO  Tax  UNE	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d  P-100, Sub 133Q  2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing	2003/2014 2000-2001 2002 2004 2012 2013 2011 2013	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  UNE  UNE	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability Of Unbundled Local Switching For The Mass Market	Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  TRO  Tax  UNE	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina South Carolina  Tennessee  Utah	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C 03-00491  2013 and 2014 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  TRO  TRO  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P Provided workshop on AT&T Mobility RCN  Provided Nor Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) Switching)  Provided Replacment Cost New of Verizon Wireless network	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  Tax  TRO  Tax  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding)(Switching)	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on McN Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  South Carolina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C 03-00491  2013 and 2014 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  TRO  TRO  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P Provided workshop on AT&T Mobility RCN  Provided Nor Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) Switching)  Provided Replacment Cost New of Verizon Wireless network	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina South Carolina  Tennessee  Utah	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C 03-00491  2013 and 2014 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  TRO  TRO  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided NCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Virgina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15 2010/11	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided NCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding)(Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon Walandline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Virgina	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15 2010/11	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  UNE  TRO  TRO  TRO  TRO  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon VA landline network  Conducted industry survey and collected public trends to develop WA specific trend	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on RCN Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Virgina  Washington	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2014/15 2016/2017	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO  TR	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon VA landline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Wirgina  Washington  Wisconsin	2013 Universal Service  2000-UA-999  P-100, SUB 133d P-100, SuB 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2013 and 2014 AT&T Mobility Tax Proceeding JointBoard on Universal Service	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15 2010/11	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P Provided workshop on AT&T Mobility RCN Provided RCN for Towers in Wake county  Deposed as witness for RCN study. Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding)(Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon Walandline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue  Provided Replacment Cost New of AT&T Mobility network  Enbanc Hearing	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Wirgina  Washington  Wisconsin	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15 2013/2014 2016-2017 2007	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO  TR	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon VA landline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Wirgina  Washington  Wisconsin  U.S.	2013 Universal Service  2000-UA-999  P-100, SUB 133d P-100, SuB 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2013 and 2014 AT&T Mobility Tax Proceeding JointBoard on Universal Service	2013/2014 2000-2001 2002 2004 2012 2013 2011 2013 2001 2004 2004 2014/15 2013/2014 2016-2017 2007	Universal Service  UNE  UNE  TRO  Tax  TRO  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO  TR	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided Review Order UNE-P  Provided Workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon Walandline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue  Provided Replacment Cost New of AT&T Mobility network  Enbanc Hearing  Presented 13 hour workshop on network modeling (solo)	Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Wirgina  Washington  Wisconsin  U.S.	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2013 AT&T Tax Proceeding 2010 Universal Service 2013 and 2014 AT&T Mobility Tax Proceeding 2015 JointBoard on Universal Service Connect America Fund Model	2013/2014 2000-2001 2002 2002 2004 2013 2011 2013 2001 2004 2014/15 2010/11 2013/2014 2016-2017 2007 2012	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO  TR	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided Review Order UNE-P  Provided Row for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon Walandline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue  Provided Replacment Cost New of AT&T Mobility network  Enbanc Hearing  Presented 13 hour workshop on network modeling (solo)  Presented overview of Connect America Cost model to FCC commissioners and/or their staffs	Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Trend factors Witness on RCN EnBanc witeness on modeling Expert on network models
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina North Carolina North Carolina Oklahoma  South Carolina  South Carolina  Tennessee  Utah  Virgina  Washington  Wisconsin  U.S.  U.S.	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2013/2014 Trend Factors 2013 and 2014 AT&T Mobility Tax Proceeding JointBoard on Universal Service Connect America Fund Model  Connect America Fund Model	2013/2014 2000-2001 2002 2004 2013 2011 2013 2001 2004 2014/15 2016/2017 2007 2012 2013/2014	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO  TR	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided RCN for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon Wireless network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue  Provided Replacment Cost New of AT&T Mobility network  Enbanc Hearing  Presented 13 hour workshop on network modeling (solo)  Presented overview of Connect America Cost model to FCC commissioners and/or their staffs	Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN EnBanc witeness on modeling Expert on network models
Maine  Mississippii  North Carolina North Carolina North Carolina North Carolina Oklahoma  Oklahoma  South Carolina  Tennessee  Utah  Wirgina  Washington  Wisconsin  U.S.	2013 Universal Service  2000-UA-999  P-100. SUB 133d P-100, Sub 133Q 2012 ATT Wireless Tax Proceeding 2013 Crown Castle Tower Valuation  2011 AT&T Tax Proceeding 2013 AT&T Tax Filing  2001-65-C 2003-326-C  03-00491  2013 and 2014 Verizon Tax Proceeding 2010 Verizon Tax Proceeding 2013 AT&T Tax Proceeding 2010 Universal Service 2013 and 2014 AT&T Mobility Tax Proceeding 2015 JointBoard on Universal Service Connect America Fund Model	2013/2014 2000-2001 2002 2002 2004 2013 2011 2013 2001 2004 2014/15 2010/11 2013/2014 2016-2017 2007 2012	Universal Service  UNE  UNE  TRO  Tax  Tax  TRO  TRO  TRO  TRO  TRO  TRO  TRO  TR	Provided Universal Service model for state proceeding. Provided workshop to Public Utility Commission and intersted parties. Witnessed on model and results.  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services  General Proceeding to Determine Permanent Pricing for Unbundled Network Elements  Triennial Review Order UNE-P  Provided workshop on AT&T Mobility RCN  Provided Review Order UNE-P  Provided Row for Towers in Wake county  Deposed as witness for RCN study.  Presented RCN for wireless and wireline networks for AT&T in Oklahoma  Generic Proceeding to Establish Prices for BellSouth Telecommunications, Inc.'s Interconnection Services, Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Network Elements and other Related Services Continued Availability Of Unbundled Local Switching For The Mass Market  Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding) (Switching)  Provided Replacment Cost New of Verizon Wireless network  Provided Replacment Cost New of Verizon Walandline network  Conducted industry survey and collected public trends to develop WA specific trend factors for the state of Washington Department of Revenue  Provided Replacment Cost New of AT&T Mobility network  Enbanc Hearing  Presented 13 hour workshop on network modeling (solo)  Presented overview of Connect America Cost model to FCC commissioners and/or their staffs	Witness on Modeling Witness on RCN Witness on RCN Witness on RCN Witness on Modeling Witness on Modeling Witness on Modeling Witness on Modeling Witness on RCN Trend factors Witness on RCN EnBanc witeness on modeling Expert on network models