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Received - 2021-08-12 02:51:18 PM Control Number - 52322 ItemNumber - 146

PUC DOCKET NO. 52322

APPLICATION OF THE ELECTRIC	§	BEFORE THE
RELIABILITY COUNCIL OF TEXAS,	§	
INC. FOR A DEBT OBLIGATION	§	PUBLIC UTILITY COMMISSION
ORDER TO FINANCE UPLIFT	§	
BALANCES UNDER PURA CHAPTER	§	OF TEXAS
39, SUBCHAPTER N, AND FOR A	§	
GOOD CAUSE EXCEPTION	§	

DIRECT TESTIMONY

OF

JULIE CAREY

ON BEHALF OF

RAYBURN COUNTRY ELECTRIC COOPERATIVE, INC.

AUGUST 12, 2021

PUC DOCKET NO. 52322

APPLICATION OF THE ELECTRIC§BEFORE THERELIABILITY COUNCIL OF TEXAS,§INC. FOR A DEBT OBLIGATION§PUBLIC UTILITY COMMISSIONORDER TO FINANCE UPLIFT§BALANCES UNDER PURA CHAPTER39, SUBCHAPTER N, AND FOR A§GOOD CAUSE EXCEPTION

DIRECT TESTIMONY OF JULIE CAREY

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DIRECT TESTIMONY OF JULIE CAREY

I. <u>BACKGROUND</u>

4 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

5 6 A. My name is Julie M. Carey. My business address is 1255 23rd Street, NW, Suite
600, Washington, DC 20037.

7 Q. BY WHOM ARE YOU EMPLOYED?

8 A. I am a Managing Director with National Economic Research Associates, Inc. 9 ("NERA") which is a global economic consulting firm. I am also an Adjunct Professor at 10 Georgetown University where I teach energy economics and policy in the graduate 11 economics and political economics programs, which includes instruction on the economics 12 and regulation of electricity and other energy and transportation sectors.

13 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL 14 BACKGROUND.

15 I have received a Bachelor of Economics from Allegheny College and taken A. 16 Doctoral Studies Program coursework and received a Masters of Economics from the Pennsylvania State University. I have worked in the electric utility industry for 17 approximately 25 years, primarily as an economic consultant. My areas of relevant 18 19 expertise include energy economics, regulatory economics, and competition analyses. I routinely analyze regulatory and economic issues within the electric utility industry 20 21 including with substantial experience with respect to wholesale power markets. I have 22 provided expert reports and testimony on a wide variety of economic issues involving the 23 electricity industry and the broader energy markets before numerous U.S. and Canadian regulatory agencies, U.S. courts, and within arbitrations. Exhibit A describes my 24 25 professional background and experience and identifies my prior testimony.

> Direct Testimony of Julie Carey On Behalf of Rayburn Country Electric Cooperative, Inc.

1	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?
2	A.	Yes. I have testified before this Commission earlier in my career.
3		II. <u>PURPOSE OF TESTIMONY</u>
4	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
5	A.	The purpose of this testimony is to provide economic and regulatory principles for
6		the Public Utility Commission of Texas (PUCT) to consider when evaluating ERCOT's
7		Application for Debt Obligation to Finance Default Balances under the Public Utility
8		Regulatory Act (PURA) Ch.39, Subchapter M and Subchapter N (HB 4492). ¹
9		III. <u>HB 4492</u>
10	Q.	WHAT WOULD BE THE IMPACT IF RAYBURN COUNTRY ELECTRIC
11		COOPERATIVE, INC. ("RAYBURN") WERE NOT ALLOWED TO
12		PARTICIPATE IN SECURITIZATION UNDER SUBCHAPTER M OR
13		SUBCHAPTER N?
14	A.	It is my understanding that the ERCOT Application requires Rayburn, as a load
15		serving entity ("LSE"), to pay for the uplift balances under Subchapter N and default
16		balances under Subchapter M based on a load ratio share of Rayburn's member customers'
17		load to the total load in ERCOT. ² However, ERCOT's Application states that Rayburn
18		should not be allowed to participate and benefit from the Securitization under Subchapter
19		N of HB 4492 and derive the price adjustment therefrom. ³ To the extent that the

¹ Application of Electric Reliability Council of Texas, Inc. for a Debt Obligation Order to Finance Uplift Balances Under PURA Chapter 39, Subchapter N, For an Order Initiating Parallel Docket, and for a Good-Cause Exception, PUC Docket No. 52322 (July 16, 2021).

² See Testimony of Rayburn- David Braun.

³ Application of Electric Reliability Council of Texas, Inc. for a Debt Obligation Order to Finance Uplift Balances Under PURA Chapter 39, Subchapter N, For an Order Initiating Parallel Docket, and for a Good-Cause Exception, PUC Docket No. 52322 (July 16, 2021). Subchapter N at page 7 and Subchapter M at page 9.

securitization under Subchapter N or M excludes Rayburn from receiving certain
securitization funds at lower costs while simultaneously requiring Rayburn (and its
member customers) to make payments and contributions toward the uplift balance funding
of the securitization funds would be unduly discriminatory and would not produce charges
and costs that are just and reasonable.⁴

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Q. WHY WOULD EXCLUDING RAYBURN FROM SECURITIZATION UNDER SUBCHAPTER M AND SUBCHAPTER N BE DISCRIMINATORY?

8 A. A regulatory approach that requires customer rates or charges for services that they 9 are not allowed to use or receive the benefit from is discriminatory in nature and 10 inconsistent with regulatory economic principles. Such an approach treats Rayburn and its 11 member customers disparately and forces this set of customers to subsidize the rest of 12 ERCOT's customers and market participants whose payments would otherwise be higher.

In addition, regulatory economic principles of cost apportionment, which is a primary objective of rate and price-setting policy, should be given due consideration in determining rates and charges to select groups of customers. The concept of cost apportionment entails that the burden of the revenue requirement needs to be distributed appropriately among the beneficiaries of the service. Simply put if Rayburn and its members' consumers derive no benefit, it should not pay for such costs. This approach is required to achieve economically efficient rates and charges.

⁴ My references to certain costs owed to ERCOT does not constitute an admission or waiver on Rayburn's behalf and Rayburn expressly reserves all rights and defenses. Rayburn reserves the right to amend or supplement its position and calculations after review of the evidence and as this docket progresses. Rayburn reserves the right to further action in this proceeding to further assure the Commission's issues specific to Rayburn are fully addressed.

1		Further compounding the disparate treatment, Rayburn is required to pay for the
2		uplift balances under Subchapter N and default balances under Subchapter M under HB
3		4492, while no market participants will contribute to its securitization under 1580.
4		For these reasons, Rayburn should be allowed to participate in the Securitization
5		under Subchapter N and M.
6		IV. <u>TESTIMONY SUMMARY</u>
7	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
8	A.	In summary, to the extent that Rayburn is required to pay for the uplift balances under
9		Subchapter N and default balances under Subchapter M as an LSE, Rayburn should be able
10		to participate as an LSE.
11	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
12	A.	Yes, it does.

Direct Testimony of Julie Carey On Behalf of Rayburn Country Electric Cooperative, Inc.

PUCT DOCKET NO. 52322

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APPLICATION OF THE ELECTRIC **RELIABILITY COUNCIL OF TEXAS, INC. FOR A DEBT OBLIGATION ORDER TO FINANCE UPLIFT BALANCES UNDER PURA CHAPTER 39, SUBCHAPTER N, AND REQUEST** FOR A GOOD CAUSE EXCEPTION

BEFORE THE

PUBLIC UTILITY COMMISSION

OF TEXAS

AFFIDAVIT

DISTRICT OF COLUMBIA

§

BEFORE ME, the undersigned authority, on this day personally appeared Julie Carey,

who, having been placed under oath by me, did depose as follows:

"My name is Julie Carey. I am of legal age and a resident of the State of Virginia. The

foregoing direct testimony, attached exhibits, and opinions offered by me are accurate, true, and

correct to the best of my knowledge and belief."

Julie Carey

	Washington, Dis	trict of Colum	nbia	
	The foregoing instr	ument was sul	bscribed and and	un beitre
	me this 12" day	of Augu	1St.	2021
/	by Dorlene	Francesc	9 Rocers	
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Direct Testimony of Julie Carey On Behalf of Rayburn Country Electric Cooperative, Inc.

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Exhibit A

Exhibit A

Julie M. Carey Managing Director

NERA Economic Consulting 1255 23rd Street NW, Suite 600 Washington, DC 20037 Tel: +1 202 466 9203 Fax: +1 202 466 3605 Mobile: +1 703 622 5032 julie.carey@nera.com www.nera.com

JULIE M. CAREY Managing Director

Julie M. Carey is a Managing Director at NERA Economic Consulting. She has substantial experience as an energy economist, providing expert evidence in energy related commercial and regulatory disputes, as well as international arbitrations. She has more than 20 years of experience addressing economic issues in power, coal, oil and gas, renewables, pipelines and railroad sectors. Ms. Carey is recognized as a leading energy expert (2019, 2020 and 2021) and a leading arbitration expert (2020) by Who's Who Legal.

In addition to her expert consultancy assignments, Ms. Carey is also an adjunct professor at Georgetown University where she teaches a graduate level course in energy economics, which includes instruction on economics of energy products and transportation and regulatory economics.

Ms. Carey provides expert consulting and testifying services on energy economic issues in commercial disputes before U.S. courts, and before arbitration panels in the U.S. and internationally. She also routinely assists energy regulators in the U.S. and Canada (U.S. Federal Energy Regulatory Commission (FERC), and the Canadian Energy Regulatory (formerly the National Energy Board of Canada), and many other state and provincial regulatory agencies in the U.S. and Canada.

Ms. Carey has substantial expertise in economic analyses of energy and transportation markets. She routinely conducts economic analyses of energy and transportation markets to understand historical and forecasted market conditions (supply, demand and prices), as well as to evaluate competition, claims of market manipulation, and other anticompetitive acts. She has conducted these analyses many dozens of times for the purposes of the regulatory approval of mergers and acquisitions, market-based rate authority, market rules, negotiated rates, as well as within investigations and commercial disputes. Her work includes evaluation of the reasonableness of rates and whether market participant bidding, trading and other behavior is discriminatory or otherwise manipulative, and whether prices reflect competitive market prices. Ms. Carey's work includes a variety of other regulatory economic analysis including affiliate relationships, cost of service and forward-looking costs, among others.

Within her commercial dispute work, Ms. Carey has been involved in many claims of breach of contract including oil and gas, pipelines, coal, power, renewable, and railroad transportation. She has also been involved in cases concerning partnership disputes, delayed plant operations, diminished value claims, replacement power, antitrust and manipulation claims, clean air act, and bankruptcy, among others. Ms. Carey has substantial experience with economic damages (historical and future lost profit analyses) and conducts asset valuation analyses. She has assessed and quantified economic damages and valuations in dozens of cases which include breach of contract, antitrust, class action, and other types of disputes.

Ms. Carey also has experience with environmental analysis (e.g., greenhouse gases and other types of



emissions) and macroeconomic modeling (i.e., jobs, GDP, taxes) in which she studies the impact of energy infrastructure construction and operations on the economy for regulatory and business decision-making.

EDUCATION

- Pennsylvania State University Doctoral Studies Program Coursework/M.A., Economics, 1993
- Allegheny College Bachelor of Science, Economics, 1991

PROFESSIONAL EXPERIENCE

2020-Present	NERA Economic Consulting – Managing Director
2017-2019	NERA Economic Consulting - Director
2016-Present	Georgetown University (Washington, DC) - Adjunct Professor
2011-2017	Navigant Consulting, Inc. (Washington, DC) - Director
2004-2010	LECG, Inc. (Washington, DC) - Principal
2000-2004	FTI Consulting, Inc. (Washington, DC) - Director, Manager
1996-2000	LECG, Inc. (Washington, DC) - Economist, Senior Associate, Associate
1994-1996	American Public Power Association (Washington, DC) - Research Analyst

CERTIFICATIONS, MEMBERSHIPS, AND AWARDS

- Leading Energy Expert by Who's Who Legal (2019, 2020, 2021)
- Leading Arbitration Expert by Who's Who Legal (2020)
- International Association for Energy Economists
- U.S. Association for Energy Economists

SELECTED ENERGY PROJECT EXPERIENCE

Power, Coal and Renewables

- Consulting expert economic analysis of wholesale power transactions and replacement energy costs in the southeastern U.S. related to a claim of a breach of power purchase tolling agreement for a cooperative electric utility.
- Consulting expert economic analysis and damages for a claim of tortious interference and unfair competition in wholesale solar panel market in the U.S.
- Expert reports and testimony regarding competition in U.S. wholesale power markets and impact to coal producers in the Powder River Basin (PRB). Analysis of generating resources economics (units, purchases and sales), short run marginal costs of generating units and least cost economic dispatch and inter-fuel competition, such as natural gas and renewables, within ISO and non-ISO areas, including MISO, SPP and ERCOT. Evaluation of generating unit commitment designations and bidding and other market rules. Statistical analysis of transmission constraints and analysis of recent and proposed transmission expansions and the impact on geographic scope of competition.

- Expert evidence and consulting in many matters related to competition within wholesale electricity markets for regulatory approval of mergers and acquisitions and market-based rate authority in regions across U.S. This work includes market power screens and delivered price test analyses and analysis of product and geographic markets, including assessments of transmission constraints. The economic analysis includes evaluation of delivered fuel costs (natural gas, coal, etc.) and operational characteristics of power plants (seasonal capabilities, short run marginal costs, efficiency rates, etc.).
- Consulting expert for a North American ISO regarding wholesale power markets, addressing economics transition away from coal, including the decommissioning of coal-fired generating units and conversion of other coal-fired generating units to natural gas.
- Expert report to respond to quantum issues associated with a \$1 billion economic damage claim in an energy contract dispute in an international arbitration. In addition, economic analysis was conducted on the market (supply, demand and pricing) and the claimant's commercial activities and behavior with respect to foreseeability.
- Expert reports and expert testimony analyzing economic and environmental analysis of the greenhouse gases (GHG) impact from the construction and operation of a new coal terminal export facility and downstream power markets for regulatory approval. This work included long term market and economic analysis of the elasticity of demand of coal, forecast of GHG emission and other energy market impacts within downstream energy markets (U.S. and Pacific Basin). This work also included analysis of power generation economics (short run marginal costs and power plant efficiencies), fuel prices (coal, LNG, natural gas, etc.), and the range of potential outcomes of the GHG forecasts.
- Consulting expert economic analysis related to a claimed breach of power plant agreements operated by a cooperative utility involving a joint owner bankruptcy. Economic analysis of joint owner's participation in formalized wholesale power markets or as vertically integrated utilities.
- Expert consulting and economic damages analyses in a dispute regarding the failed performance of a steam generator turbine in an ICC international arbitration (for western U.S.). The damages claim was approximately \$7 billion. This work included economic theory and quantification of damages under a benefit of the bargain and rescission damages theories as well as evaluation of long term energy forecasts, economic performance and replacement power purchases.
- Expert consulting in a regulatory investigation into the reasonableness of market prices paid for natural gas purchases and bidding behavior of certain natural gas fired power generation facilities made during the 2013/2014 winter often referred to as the polar vortex. This work involved the eastern U.S markets.
- Expert testimony regarding the impact of a proposed wholesale power market rule regarding the transmission allocation among market participants, incentives for new entry, and an evaluation of economic efficiency and potential market power within the wholesale electricity market.
- Expert testimony regarding a claim of economic damages (past and future) associated with the alleged breach of a power purchase agreement within an international arbitration (SCC). This work included analysis of the appropriate economic theory of damages, quantification of economic damages and energy market related analysis.
- Expert report regarding past and future economic damages and economics of the silane gas market and supply, demand and pricing in the solar power panel market in a contract dispute before a bankruptcy court.
- Expert reports in a coal contract commercial dispute analyzing economic damages and replacement coal source and transportation alternatives.

- Expert consulting regarding antitrust claims regarding the solar panel manufacturing industry. This work included economic analysis of the potential anticompetitive behavior and a valuation analysis of a solar panel company, including the development of a discounted cash flow analysis analyzing the future cash flows and net present value of the enterprise.
- Expert consulting in numerous disputes/investigations involving claims of market manipulation and anticompetitive behavior within electricity product markets. This work included evaluation of decision-making surrounding power plant outages and trading related activities and evaluation whether the market prices reflect competitive market prices (i.e., consistent with supply, demand, prices and constraints, etc.). Demand simulations were conducted to evaluate the impact on market prices. This work involved the western U.S markets, including California.
- Expert report before a regulatory agency analyzing the economic impact (GDP, jobs, etc.) from constructing and operating a proposed new combined cycle power plant and evaluating the potential impact on competition in a wholesale power market.
- Expert report in an international arbitration (HKIAC) providing an analysis of the Chinese and global solar panel market, reasonableness and competitiveness of the sales negotiations and negotiated prices, market value of solar power products and other valuation related issues. The dispute surrounds the performance of numerous agreements to acquire, construct and operation numerous PV manufacturing production lines.
- Expert consulting in a matter related to a new source environmental review involving a coal fired power plant in the Midwestern U.S. and evaluation of electricity wholesale power market and dispatch related impacts on market demand over time.
- Expert consulting for a natural gas product dispute within numerous arbitrations to evaluate the asset valuations of numerous natural gas-fired power plants, including long term forecasts of market prices, revenues and costs, cost of capital, and the development of a discounted cash flow analysis. This work included a probabilistic analysis to forecast cash flows under different financial and operational conditions.

Oil and Gas

- Economic and competition analyses in numerous regulatory proceedings pertaining to refined petroleum product and crude oil and transportation markets for oil pipelines market-based rate authority. This work includes analysis of product and geographic markets and the evaluation of origin and destination market, analysis of refined petroleum product and crude oil markets and transportation economics (rail, truck, waterborne, and pipeline) throughout most U.S. markets, Canada and many other international markets and analysis of competitive prices and market concentration.
- Analysis of wholesale propane markets, supply and demand and potential transportation alternatives for propane in the Midwestern U.S. in a claimed discrimination by a shipper on an NGL pipeline.
- Expert consulting in a regulatory investigation into the reasonableness of market prices paid for natural gas purchases and bidding behavior of certain natural gas fired power generation facilities made during the 2013/2014 winter often referred to as the polar vortex. This work involved the eastern U.S markets.
- Expert report and testimony in an arbitration regarding economic analysis of crude oil markets (Western Canadian and global markets), economics of conventional and unconventional oil and gas production resources, and the potential causal linkage of falling crude oil prices since 2014 and impact thereof on the energy construction industry and certain companies located in Western Canada.

- Economic consulting and expert report before the NEB regarding potential of discriminatory behavior that can arise from an unregulated affiliate of a regulated oil pipeline and other economic issues pertaining to a crude oil pipeline including evaluation of appropriate code of conduct. The economic analysis includes evaluation of substantial quantities of NGL butane and other oil products injections into the pipeline system and the impact on the quality and financial harm and economic damages for the product. This work included econometric analysis and the statistical significance of butane in the diminution of crude oil value. This work involved the Canadian and U.S. midwestern and Gulf Coast crude oil product and transportation markets.
- Consulting expert to quantify economic damages in a claim of unjust enrichment with respect to oil and gas assets and sale proceeding in a U.S. shale oil production basin.
- Expert consultation for a gas turbine manufacturer on the outlook for market demand across different regions around the world.
- Expert consulting in numerous disputes/investigations involving claims of market manipulation and anticompetitive behavior within natural gas product markets. This work included evaluation of economic purpose of natural gas product purchases and sales as well as economic analysis to evaluate whether the market prices reflect competitive market prices (i.e., consistent with supply, demand, prices and constraints, etc.). This work involved the western U.S markets, including California.
- Expert consulting to conduct economic analysis of crude oil markets, pricing, and alternative transportation economics (rail, truck, waterborne, and pipeline) in a crude oil product contract dispute in a commercial arbitration. This work involved California and international markets.
- Expert consulting in a claimed breach of a refined petroleum products contract involving economic analysis of crude oil and refined product markets, as well as rail, truck, waterborne and pipeline transportation economics and economic damages. This work involved the western U.S. markets and international markets.
- Expert consulting assisting the Canadian Competition Bureau (CCB) in an investigation of potential energy market manipulation within the wholesale natural gas liquids product markets and price spikes, pertaining to propane. This work includes market analysis and econometric analysis to evaluate whether the actual market prices reflect competitive market prices (i.e., consistent with supply, demand, prices, constraints, etc.) or if manipulative or anticompetitive behavior occurred. This work included economic analysis of product and transportation markets (including pipeline, railroad, and trucking).
- Expert consulting in a refined product transportation contract dispute involving economic analysis of rail, truck, and pipeline transportation. This work involved the midwestern and Gulf Coast regions.

Railroad and Coal

- Expert report addressing economic and regulatory aspects of the appropriate rate to use for trackage rights fees, including numerous valuation methodologies.
- Expert report and expert testimony regarding multiple breach of contract claims for joint-line transportation service, and financial, economic and regulatory considerations regarding the contracts, negotiations and the financial and economic impact.
- Expert consultation analyzing economics of containerized freight transportation, including intermodal rail and competition with alternative transportation modes in a transportation contract dispute and claims of anticompetitive behavior for a commercial arbitration.
- Expert report in STB proceeding regarding the potential introduction of indirect competition analyses within market dominance determinations for coal transportation rates to utility generation facilities.

- Expert consultation analyzing the economics of competition and anticompetitive behavior in railroad transportation services including evaluating the impact of fuel surcharges in a commercial dispute.
- Expert evidence in numerous regulatory proceedings involving rail transportation rate disputes for coal, including evaluation of appropriate regulatory economic approach to assess the reasonableness of a rate, long term forecasts of coal deliveries, coal-power plant heat rate and performance, transportation rates (all modes), and revenue attribution methodologies for shared facilities

SELECTED EXPERT AFFIDAVITS AND TESTIMONY

Highly Confidential Arbitration, Expert Report, May 26, 2021, Expert Testimony July 13 to 16, 2021.

FERC Docket No. ER11-47, Triennial Update for Market Based Rate Authority for American Electric Power Company, et al. in the Southwestern Power Pool region, Affidavit of Julie M. Carey and Al Bremser, June 29, 2021.

STB, FD 32760 (Sub-No. 46), BNSF Railway Company – Terminal Trackage Rights – The Kansas City Southern Railway Company and The Union Pacific Railroad Company, Opening Verified Statement (VS) of Julie M. Carey, January 26, 2021; Reply VS on April 12, 2021 and Rebuttal VS on May 11, 2021.

FERC Docket Nos. OR18-7-002, et al. (Consolidated), Epsilon Trading, LLC, Chevron Products Company, and Valero Marketing and Supply Company v. Colonial Pipeline Company, In Market-Based Rate Proceeding, Prepared Answering Testimony of Julie M. Carey, January 24, 2020; Prepared Answering Testimony, April 6, 2020. Trial Testimony (December 3, 4 and 7-9, 2020)

FTC v. Peabody Energy Corporation and Arch Coal, Inc., Civil Action No. 4:20-cv-000317-SEP before the U.S. District Court Eastern District of Missouri, Initial Expert Report of Julie M. Carey, May 29, 2020; Response Expert Report (June 19, 2020), Deposition Testimony (June 29, 2020), Trial Testimony (July 21, 2020).

FERC Docket No. OR20-5-000, NGL Supply Wholesale, LLC v. Phillips 66 Pipeline LLC and Phillips 66 Company, Affidavit of Julie M. Carey, January 2, 2020.

In the Matter of Arbitration, under the London Court of International Arbitration ("LCIA") Arbitration Rules, LCIA Case No. 183933, Between Hemlock Semiconductor Pte. Ltd, Claimant and Yingli Green Energy International Trading Limited, Respondent, Expert Report, May 9, 2019.

STB, FD 32760 (Sub-No. 46), BNSF Railway Company – Terminal Trackage Rights – The Kansas City Southern Railway Company and The Union Pacific Railroad Company, Verified Statement of Julie M. Carey, February 4, 2019.

Canadian National Energy Board Hearing Order RHW-002-2017, File OF-Tolls-Group2-T309-2017-01 01, TEML Westspur Pipelines Limited, Notice of Complaint pursuant to Part IV of the National Energy Board Act by Crescent Point Resources Partnership, Reply to Sur-Reply Expert Report of Julie M. Carey, November 23, 2018. Reply Expert Report (submitted jointly with other subject matter experts), August 31, 2018.

FERC Docket No. ER11-47, Triennial Update for Market Based Rate Authority for American Electric Power Company, et al. in the Southwestern Power Pool region, Affidavit of Julie M. Carey and Laura Olive, June 27, 2018.

In the Matter of Arbitration Proceeding Concern disputes with respect to a share purchase agreement dated June 26, 2014 Between Pacer Construction Holdings Corporation, Pacer Construction Management Corporation, Pacer Mamisiwin Corporation, Pacer Construction Corporation, Pacer Foundations Corporation, Pacer Projects Corporation, FTI Consulting Canada Inc. (in its capacity as receiver and manager of Pacer Promec Energy Corporation and Pacer Promec Energy Construction Corporation) and

Mastec, Inc. and Richard Pelletier holdings Inc., Richard Pelletier, Resman holdings ltd., Don Taylor, 592652 Alberta ltd., and John Simpson; Testimony of Julie M. Carey and Bradley A. Heys, June 18, 2018.

Millennium Bulk Terminals - Longview, LLC, A Delaware Limited Liability Corporation V. Washington Department of Ecology, An Agency of The State of Washington; Superior Court of Washington For Thurston County, Case No. 17-2-06442-34, Declaration of Julie M. Carey, May 9, 2018.

In the Matter of Arbitration Between CSX Transportation, Inc., Claimant and Central Railroad Company of Indianapolis d/b/a Chicago, Fort Wayne & Eastern Railroad; the Columbus & Ohio River Railroad Company; First Coast Railroad Inc.; Golden Isles Terminal Railroad, Inc.; Indiana & Ohio Railway Company; Marquette Rail, LLC; Meridian & Bigbee Railroad, LLC; Mid-Michigan Railroad, Inc. d/b/a Michigan Shore Railroad, Inc.; and Riceboro Southern Railway, LLC, Testimony of Julie M. Carey, April 20, 2018.

In the Matter of Arbitration Proceeding Concern disputes with respect to a share purchase agreement dated June 26, 2014 between Pacer Construction Holdings Corporation, Pacer Construction Management Corporation, Pacer Mamisiwin Corporation, Pacer Construction Corporation, Pacer Foundations Corporation, Pacer Projects Corporation, FTI Consulting Canada Inc. (in its capacity as receiver and manager of Pacer Promec Energy Corporation and Pacer Promec Energy Construction Corporation) and Mastec, Inc. and Richard Pelletier Holdings Inc., Richard Pelletier, Resman Holdings Itd., Don Taylor, 592652 Alberta Itd., and John Simpson; Reply Expert Report of Julie M. Carey and Bradley A. Heys, April 9, 2018.

In the Matter of New England Central Railroad, Inc., Trackage Rights Order, Pan Am Southern, LLC. Surface Transportation Board ("STB"), Docket No. FD 35842, Verified Statement of Julie M. Carey, December 6, 2017.

In the Matter of Arbitration Between CSX Transportation, Inc., Claimant and Central Railroad Company of Indianapolis d/b/a Chicago, Fort Wayne & Eastern Railroad; the Columbus & Ohio River Railroad Company; First Coast Railroad Inc.; Golden Isles Terminal Railroad, Inc.; Indiana & Ohio Railway Company; Marquette Rail, LLC; Meridian & Bigbee Railroad, LLC; Mid-Michigan Railroad, Inc. d/b/a Michigan Shore Railroad, Inc.; and Riceboro Southern Railway, LLC, Expert Testimony of Julie M. Carey, November 15, 2017.

Application of Millennium Bulk Terminals-Longview, LLC for Shoreline Substantial Development Permit and Conditional Use Permit, File Number 12-04-0375, Shoreline Permit Number 17-0992, Expert Testimony of Julie M. Carey, November 6, 2017.

Application of Millennium Bulk Terminals-Longview, LLC for Shoreline Substantial Development Permit and Conditional Use Permit, File Number 12-04-0375, Shoreline Permit Number 17-0992, Expert Report of Julie M. Carey and Peter Rawlings (ERM), October 26, 2017.

National Energy Board Hearing Order RHW-002-2017, File OF-Tolls-Group2-T309-2017-01 01, TEML Westspur Pipelines Limited, Notice of Complaint pursuant to Part IV of the National Energy Board Act by Crescent Point Resources Partnership, Expert Report of Julie M. Carey, September 15, 2017.

Minnesota Public Utilities Commission, Docket No. PL-9/PPL-15-137, In the Matter of the Application of Enbridge Energy, Limited Partnership for a Routing Permit for the Line 3 Replacement Project in Minnesota from the North Dakota Border to the Wisconsin Border., Expert Report of Julie M. Carey (With Dr. Rick Lichty). January 30, 2017.

FERC Docket No. ER10-2179 et al., Triennial Update for Market Based Rate Authority for Calvert Cliffs Nuclear Power Plant, LLC, et al. in the Northeast region, Affidavit of Julie M. Carey (with Julie R. Solomon). December 29, 2016.

FERC Docket No. ER13-1536 et al., Triennial Update for Market Based Rate Authority for Exelon in the

Northeast region, Affidavit of Julie M. Carey (with Julie R. Solomon). December 29, 2016.

FERC Docket No. ER10-1823 et al., Triennial Update for Market Based Rate Authority for Dominion Energy Marketing, et al. in the Northeast region, Affidavit of Julie M. Carey (with Julie R. Solomon). December 29, 2016.

FERC Docket No. ER11-1933 et al., Triennial Update for Market Based Rate Authority for Green Mountain Power, et al. in the Northeast region, Affidavit of Julie M. Carey, December 23, 2016

FERC Docket No. ER11-47 et al., Triennial Update for Market Based Rate Authority for American Electric Power Company, et al. in the Northeast region, Affidavit of Julie M. Carey. December 27, 2016.

U.S. Army Corps of Engineers, Seattle District, Response to Draft Environmental Impact Statement for the National Environmental Policy Act Regarding the Proposed Millennium Bulk Terminals Longview Project, Expert Evidence. November 29, 2016.

Cowlitz County and the Washington State Department of Ecology, Response to Draft Environmental Impact Statement for the State Environmental Policy Act Regarding the Proposed Millennium Bulk Terminals Longview Project, Expert Evidence. June 13, 2016.

FERC Docket No. Docket No. EC16-, Supplemental Affidavit of Julie M. Carey to Support Ohio Valley Electric Corporation's Application for Market Based Rate Authority in PJM, MISO, and other market areas. January 17, 2016. (Initial Report November 6, 2015)

Wisconsin Public Service Commission, Docket No. 6800-CE-176, Application for a CPCN To Build an Natural Gas-Fueled Power Plant at its Riverside Energy Center Facility, Surrebuttal Testimony of Julie M. Carey. December 16, 2015.

Wisconsin Public Service Commission, Docket No. 6800-CE-176, Application for a CPCN To Build an Natural Gas-Fueled Power Plant at its Riverside Energy Center Facility, Rebuttal Testimony of Julie M. Carey. December 4, 2015.

FERC Docket No. Docket No. EC15-, Supplemental Affidavit of Julie M. Carey to Support PNM's Application for Authorization of Disposition of Jurisdictional Facilities. November 6, 2015. (Initial Report September 25, 2015.)

FERC Docket No. ER11-47, Triennial Update for Market Based Rate Authority for American Electric Power Company, et al. in the Southwestern Power Pool region, Affidavit of Julie M. Carey. June 30, 2015.

FERC Docket No. ER10-2302, Change in Status Filing for Public Service Company of New Mexico, et al., Affidavit of Julie M. Carey. August 15, 2014.

FERC Docket No. ER14-, Change in Status Filing for American Electric Power Company, et al., Affidavit of Julie M. Carey (with Ben Ullman). December 27, 2013.

FERC Docket No. ER11-47 et al., Triennial Update for Market Based Rate Authority for American Electric Power Company, et al. in the PJM RTO region, Affidavit of Julie M. Carey. December 20, 2013.

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