



Filing Receipt

Filing Date - 2023-08-16 08:13:26 AM

Control Number - 54634

Item Number - 385

§ 22.144(c)(2)(F), FEA stipulates that its responses may be treated by all parties as if they were made under oath.

II. SPECIFIC RESPONSES

FEA's written responses to SPS's First Request for Information are attached and incorporated by reference. Each response is stated on or attached to a separate page on which the request has been restated. In accordance with 16 TAC § 22.144(c)(2)(A), each response lists the preparer or person under whose direct supervision the response was prepared and any sponsoring witness.

Respectfully submitted,

FEDERAL EXECUTIVE AGENCIES

By: /s/Peter Meier_____
Peter Meier
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Dated: August 16, 2023

**SOAH DOCKET NO. 473-23-14020
PUC DOCKET NO. 54634**

**APPLICATION OF SOUTHWESTERN § BEFORE THE STATE OFFICE
PUBLIC SERVICE COMPANY FOR § OF
AUTHORITY TO CHANGE RATES § ADMINISTRATIVE HEARINGS**

**FEDERAL EXECUTIVE AGENCIES'
RESPONSES TO SOUTHWESTERN PUBLIC SERVICE COMPANY'S
FIRST REQUEST FOR INFORMATION,
QUESTION NOS. 1-1 THROUGH 1-5**

DISCOVERY REQUEST SPS-FEA 1-1:

Please provide, in native format, all workpapers and documents supporting the testimony of each witness filing testimony on your behalf in this proceeding. Please ensure that all formulas and cells are intact.

RESPONSE: The materials were already provided by Peter Meier by e-mail on August 6, 2023. Please refer to *54634 Etheridge Attachment DDE-6, WP-1_WP-4.xlsx* and *54634 Etheridge Attachment DDE-6, WP-5_CostBased_SPSModel.xlsx* that support Mr. Etheridge's testimony. Please refer to following that support Ms. Reno's testimony: *SPS DOE MReno Work Papers MLR-1a to MLR-1u.xlsx*, *SPS DOE MReno Work Papers MLR-2a to MLR-2e.xlsx*, *Work Papers MLR-1a to MLR-1t.pdf*, *Work Papers MLR-2a to MLR-2e.pdf*, *Work Paper MLR-3 Yahoo Growth Rates.pdf*, *Work Papers MLR-4 Zachs Growth Rates.pdf*, *MLR-5 CNN Growth Rates.pdf*, and *MLR-6 VL Company Sheets.pdf*.

Preparers: Dwight Etheridge and Maureen Reno,
with assistance of counsel

Response Date: August 16, 2023

Sponsors: Dwight Etheridge and Maureen Reno

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR AUTHORITY TO CHANGE RATES § **BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

APPLICATION OF SOUTHWESTERN § BEFORE THE STATE OFFICE
PUBLIC SERVICE COMPANY FOR § OF
AUTHORITY TO CHANGE RATES § ADMINISTRATIVE HEARINGS

DISCOVERY REQUEST SPS-FEA 1-3:

- a. A list of all cases in which the testifying expert has submitted testimony, from 2011 to the present;
- b. Copies of all prior testimony, articles, speeches, published materials, and peer review materials written by the testifying expert, from 2011 to the present;
- c. Copies of transcripts where the testifying expert was cross examined in the last ten years; if the transcript(s) are not within your possession, custody, or control, identify the proceeding(s) and date(s) the testifying expert was cross-examined;
- d. Copies of deposition transcripts of the testifying expert in the last ten years; if the transcript(s) are not within your possession, custody, or control, identify the proceeding(s) and date(s) the testifying expert was deposed;
- e. The testifying expert's billing rate for this proceeding; and
- f. All documents provided to, reviewed by, or prepared by or for the testifying expert in anticipation of the testifying expert filing testimony in this proceeding.

a. Please refer to the attached *Exhibit SPS-FEA 1-3a.pdf* for an updated Appendix, Qualifications of Dwight D. Etheridge, which will replace the Appendix attached to Mr. Etheridge's direct testimony, for a list of the cases in which Mr. Etheridge has submitted testimony. Please refer to Ms. Reno's Appendix A: Curriculum Vitae and Qualifications, attached to her direct testimony, for a list of the cases in which Ms. Reno has submitted testimony.

- b. Mr. Etheridge's prior testimony is publicly available on the applicable state utility commission websites using the case numbers supplied in Mr. Etheridge's updated Appendix. Ms. Reno's prior testimony is publicly available on the applicable state utility commission websites using the case numbers supplied in Ms. Reno's Appendix A.

Please contact counsel to FEA if SPS seeks relevant testimony of Mr. Etheridge or Ms. Reno that it cannot locate via the Internet.

There are no articles, speeches, published material, and peer review materials written by either Mr. Etheridge or Ms. Reno in the last ten years.

- c. Within the last ten years, Mr. Etheridge stood for cross-examination in five cases. SPS was a party in two cases, PUCT Docket Nos. 43695 and 48440, and SPS has the transcripts for those cases. For the other three cases, Case Nos. 9393 and 9471 before the Maryland Public Service Commission and Docket DPU 19-120 before the Massachusetts Department of Public Utilities, the transcripts are not within Mr. Etheridge's possession, custody, or control. Mr. Etheridge was cross-examined on June 27 or 28, 2016, in Case No. 9393, and on June 10, 2019, in Case No. 9471. He also stood for cross-examination on June 29, 2020, in DPU 19-120, although no party asked him any questions.

With respect to the transcripts in cases where Ms. Reno was cross-examined in the last ten years, the transcripts are not within her possession, custody, or control, nor does Ms. Reno have present knowledge of the dates that she was cross-examined. However, Ms. Reno's present recollection is that she was cross-examined in the following cases listed on her qualifications in the last ten years: Georgia Docket No. 44280, Texas Docket No. 53601, New Hampshire Docket No. DE 21-078 (no written testimony; oral testimony and questions from the Commission), New Hampshire Docket No. DG 21-104 (Commission cross only regarding a settlement), Texas Docket No. 52195, New Mexico Case No. 20-00222-UT, Georgia Docket No. 42516, Arizona Docket No. E-01933A-19-0028, New Mexico Case No. 18-00124-UT, Oklahoma Docket Nos. PUD 201700151 and PUD 201500208, Texas Docket No. 43695, and Missouri Case No. ER 2014-0370.

- d. Mr. Etheridge was deposed in Maryland Case No. 9471 on May 16, 2019. A copy of the deposition transcript is attached as *Exhibit SPS-FEA 1-3d.1.pdf*. The Acknowledgement of the Deponent and the transcript correction are attached as *Exhibit SPS-FEA_1-3d.2.pdf* and *Exhibit SPS-FEA_1-3d.3.pdf*, respectively. Ms. Reno was deposed in Texas Docket No. 43695 by SPS.
- e. Exeter Associates, Inc. ("Exeter") is a small economic consulting firm and a small business for federal contracting purposes. Mr. Etheridge is one of Exeter's principals and officers. Ms. Reno is an independent consultant working for Exeter on a task basis. Mr. Etheridge's and Ms. Reno's billing rates for this proceeding are Exeter's commercially sensitive information, and the information is subject to restriction on disclosure pursuant to Department of Energy's (DOE) Utility Support Services Contract with Exeter. Notwithstanding the foregoing, Mr. Etheridge states that his and Ms. Reno's billing rates to DOE for this proceeding are within the range of \$200 per hour to \$320 per hour.

- f. This information either has already been provided, is identified herein, or is available through the materials filed in the docket of this proceeding.

Preparers: Dwight Etheridge and Maureen Reno

Response Date: August 16, 2023

Sponsors: Dwight Etheridge and Maureen Reno

**SOAH DOCKET NO. 473-23-14020
PUC DOCKET NO. 54634**

**APPLICATION OF SOUTHWESTERN § BEFORE THE STATE OFFICE
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**THE FEDERAL EXECUTIVE AGENCIES’
RESPONSES TO SOUTHWESTERN PUBLIC SERVICE COMPANY’S
FIRST REQUEST FOR INFORMATION,
QUESTION NOS. 1-1 THROUGH 1-5**

DISCOVERY REQUEST SPS-FEA 1-4:

To the extent not provided earlier, for each consulting expert whose mental impressions or opinions have been reviewed by one or more of your testifying experts in this case, please provide:

- a. A list of all cases in which the consulting expert has submitted testimony, from 2011 to the present;
- b. Copies of all prior testimony, articles, speeches, published materials, and peer review materials written by the consulting expert, from 2011 to the present;
- c. The consulting expert’s billing rate for this proceeding; and
- d. All documents provided to, reviewed by, or prepared by or for the consulting expert in anticipation of the testifying expert filing testimony in this proceeding.

RESPONSE: None.

Preparer: Counsel to FEA

Response Date: August 16, 2023

Sponsor: Not applicable

APPLICATION OF SOUTHWESTERN § **BEFORE THE STATE OFFICE**
PUBLIC SERVICE COMPANY FOR § **OF**
AUTHORITY TO CHANGE RATES § **ADMINISTRATIVE HEARINGS**

9

CERTIFICATE OF SERVICE

I, Peter Meier, Attorney for the U.S. Department of Energy on behalf of the Federal Executive Agencies, hereby certify that a copy of the foregoing **FEDERAL EXECUTIVE AGENCIES' RESPONSES TO SOUTHWESTERN PUBLIC SERVICE COMPANY'S FIRST REQUEST FOR INFORMATION** was served on all parties of record in this proceeding on this August 16, 2023 by facsimile, electronic mail and/or First Class, U.S. Mail, Postage Prepaid.

/s/ Peter Meier

Peter Meier

Attorney-Adviser

United States Department of Energy

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DWIGHT D. ETHERIDGE

Mr. Etheridge is a principal at Exeter Associates, Inc. (Exeter) with 37 years of wide-ranging experience in the utility industry. His areas of expertise include business plan development, industry restructuring, rate design, marginal and embedded class cost-of-service studies, utility revenue requirement issues, load forecasting, resource planning, electric transmission system evaluations, natural gas pipeline analyses, power procurement, utility benchmarking studies, distributed generation, telecommunications, and contract negotiations. Mr. Etheridge has extensive experience in utility infrastructure analyses from his prior experience at a western electric utility and at Exeter while supporting federal and state clients on matters involving the need for, or alternatives to, electric transmission and natural gas transportation facilities.

His management experience includes reporting to the chief executive officer (CEO) of a western utility during electric deregulation and a merger of two utilities, and advising the CEO on many topics, including: regulatory issues, legislative negotiations, strategic focus, decision analysis, and merger integration. While working at the utility (and its successor) he reported directly to six different executives at various times that were, or subsequently advanced to become, either presidents or CEOs of utilities. His interactions with those executives enabled him to gain an extraordinarily broad-based knowledge of utility issues across multiple disciplines, including: electric production, transmission, and distribution facilities; administrative functions and back-office systems; financial analysis; strategic and resource planning; and regulatory affairs. He also has substantial project management experience in various progressively more responsible leadership roles in utility management and gained as a consultant.

Mr. Etheridge has extensive experience developing analytical and strategic solutions on a variety of utility issues and communicating on those issues to regulatory commissions, legislatures, senior management, boards of directors, and the public. He has presented expert testimony on 42 occasions and has acted as a spokesperson numerous times on television, radio, and in print.

Education

Bachelor of Science in Business Administration,
University of California, Berkeley (1985)

Previous Employment

2004-2005	Independent Strategy and Business Consultant
1999-2004	Strategic Director, Sierra Pacific Resources, and its Subsidiaries
1986-1999	Nevada Power Company Leader of the Industry Restructuring Team Director, Pricing and Economic Analysis Economist Load Forecast Analyst

Professional Experience

Mr. Etheridge's work at Exeter has been focused in the following areas:

Technical and regulatory support to U.S. Department of Energy (DOE) facilities related to utility services procurement, contract negotiations, infrastructure studies, long-term commodity energy price forecasting, energy-related business cases, and regulatory intervention support. This work has encompassed many of DOE's facilities and oftentimes entailed unique circumstances specific to each facility. Examples include:

Development of an options study for alternative 138 and 230-kilovolt (kV) transmission delivery systems to serve the Yucca Mountain Nuclear Waste Repository (Yucca Mountain) that was to be located at the Nevada National Security Site (NNSS) (formally the Nevada Test Site).

Development of an options study for supplying power to a proposed fifth Strategic Petroleum Reserve site with a planned location near Richton, Mississippi.

Evaluation of the reasonableness of operations and maintenance costs for the 115-kV transmission system and associated distribution substations that serve the Savannah River Site and related negotiations with an electric utility.

Development of long-term commodity energy price forecasts to support power procurement and infrastructure decisions at multiple DOE facilities, including Los Alamos National Laboratory and Brookhaven National Laboratory.

Development of business plans and related studies for on-site renewable energy at multiple DOE facilities, including Sandia National Laboratories and the Kansas City National Security Campus.

Development of power procurement recommendations and risk management strategies for DOE's northern California laboratories and other DOE facilities.

Development of an options study for right-sizing the transmission delivery system to serve the Paducah Gaseous Diffusion Plant that was receiving service at four switchyards via 18 incoming 161-kV transmission lines and five government-owned 161-kV tie lines.

Studies related to right-sizing the transmission delivery system to serve the Portsmouth Gaseous Diffusion Plant that is receiving service at a switchyard via four incoming 345-kV lines and a government-owned 345-kV tie line to a nearby utility-owned substation.

Professional Experience (cont'd)

Evaluation of the economics of a natural gas pipeline lateral to the Hanford Site's central plateau area in eastern Washington and related negotiations with a natural gas utility.

Analysis of the economics of a natural gas pipeline lateral to the West Valley Demonstration Project in western New York and related negotiations with a natural gas utility.

Development of a power supply options study for DOE's Long Baseline Neutrino Facility in Lead, South Dakota, which involved an evaluation of an existing 69-kV delivery system option and distribution voltage alternatives.

Contract negotiations related to line extensions, electric facilities agreements, and electrical equipment ownership transfers at multiple DOE facilities, including Idaho National Laboratory and Argonne National Laboratory.

Rate intervention support, contract negotiations, and expert testimony on a variety of topics, including: marginal and embedded class cost-of-service studies; rate design; revenue requirements issues; the need for transmission lines; electricity and natural gas hedging strategies; electric utility operations and maintenance cost benchmarking studies intended to evaluate relative performance at cost control, as well as for purposes of projecting future test year expenses; natural gas expansion area economics; hydropower valuations; and distribution loss studies.

Evaluation of the need for, and alternatives to, proposed transmission lines in support of Maryland's Department of Natural Resources. Proposed transmission system expansions or enhancements studied include: the Mid-Atlantic Power Pathway, a proposed project involving a 500-kV submarine and overhead high-voltage direct current line transmission line and a 230-kV transmission line from Virginia into eastern Maryland; the Independence Energy Connection Project involving two 500/230-kV substations in Pennsylvania, each with a corresponding 230-kV line into Maryland, which resulted from the PJM Interconnection, L.L.C.'s first ever long-term market efficiency solicitation; several other lower voltage lines in certificate of public convenience and necessity (CPCN) proceedings in Maryland; and multiple other proposed transmission system expansions or enhancements that were either smaller in scope or that did not advance to a CPCN proceeding, including the Potomac-Appalachian Transmission Highline, a proposed 500-kV line from West Virginia into Maryland.

Electricity and natural gas procurement support for federal and commercial facilities. Support included review of utility procurement strategies for multiple DOE facilities and U.S. Air Force bases to identify areas for potential utility cost savings. This work often entails development of an understanding of the transmission or distribution delivery systems serving the facilities.

Professional Experience (cont'd)

As an independent consultant, Mr. Etheridge:

Led an engagement for a western consulting firm to review the load forecasting methodologies and forward price curve models employed by a southwestern municipal water and power utility and to recommend improvements.

Led an engagement for a western consulting firm to develop rate design options for a southwestern municipal water and power utility. The rate design recommendation was designed to facilitate the implementation of operational strategies and the achievement of operational savings identified in a previous consulting engagement. It was also designed to accommodate additional electrical loads if other water municipalities decided to jointly participate in wholesale markets.

Collaborated with a team from an international consulting firm to support a Midwest utility's effort to ensure that its accounting and rates departments were prepared for the Midcontinent ISO's "Day 2" market opening scheduled for March 1, 2005. The project involved developing process flows of information required by the accounting and rates departments, and significant interaction with the corporate information technology department. The project also involved reviewing rates and regulatory strategies for potential changes under the Day 2 market rules.

Prepared a competitive analysis for a Midwest utility's unregulated subsidiary on behalf of an international consulting firm. The analysis focused on comparing the subsidiary's product and service offerings, and value propositions, against those of its competitors, as well as evaluating the dynamics occurring within the various market segments.

Led an engagement for a western consulting firm to identify strategies for maximizing the savings potential of switching electricity suppliers for a southwestern municipal water and power utility. The economic analyses developed as part of the engagement identified multi-million-dollar savings potential that could be achieved over ten years through changes in both suppliers and operational strategies. In addition, the client realized thousands in immediate savings from billing errors that were identified during the engagement, as well as the potential for hundreds of thousands in annual savings that could be realized through enforcement of the provisions of existing contracts.

Collaborated with a team from an international consulting firm to facilitate the development of a strategic plan for a western municipal power and water utility. The project included leading the utility's management team through an all-day planning session to develop divisional strategies consistent with the utility's mission statement.

Professional Experience (cont'd)

As a strategic director for Sierra Pacific Resources, Mr. Etheridge:

Developed a forecasting model for power and gas prices that was capable of blending fundamentals-based power and natural gas price forecasts from multiple vendors while maintaining rational market implied heat rates, as well as consistent relationships across various natural gas market centers and power trading hubs in the western U.S. The models enabled forecasters to produce timely forecast updates as natural gas futures prices changed, or when vendors updated their forecasts, while maintaining an easily audited trail of assumptions across forecast updates.

Developed sophisticated financial models to evaluate the potential return on investment of distributed generation projects that might be deployed by large commercial and industrial customers. The models investigated gas-fired reciprocating engines and turbines, as well as multi-unit installations, varying performance characteristics, and partial standby requirements. This project was undertaken in conjunction with redesigning retail standby rates and the introduction of new interconnection rules.

Investigated the potential of using private equity partners to pursue power plant development and/or acquisition in southern Nevada, including the possibility of a public/private partnership to leverage the credit ratings of a local governmental entity.

Gained valuable indirect experience in the development and implementation of risk management and risk control procedures while working on energy supply projects during the period when new corporate risk policies were developed, implemented, and defended in litigated proceedings.

Supported a telecommunications subsidiary by acting as the lead in the development of business plans for two metro area networks and a long-haul opportunity. Co-presented the business plans with the lead director for the subsidiary to the Board of Directors and obtained the required initial funding of \$44 million.

Supported a telecommunications subsidiary by acting as the lead in the development of a fiber-to-the-home business plan with an external team of consultants. The plan addressed the feasibility of multiple bundled service offerings and a targeted deployment in several western markets. Participated in negotiations with subsidiary management and multiple potential partners, including service providers with a national footprint, technology partners, and content providers. The plan was tabled when key partnership agreements could not be put in place to pursue a "beta" test of the technology and business model.

Participated on the team that developed a successful bid to acquire a northwestern electric utility, including due diligence, management presentations by the company being acquired, and strategy discussions with the CEO and financial advisors.

Professional Experience (cont'd)

As leader of the industry restructuring team at Nevada Power Company (NPC), Mr. Etheridge:

Reported to the CEO and led an internal team of directors assigned full-time to electric industry restructuring. Directed and managed the team's development and presentation of company positions on restructuring, including expert testimony before the Public Utilities Commission of Nevada (PUCN) and to the Nevada Legislature. Hired multiple consultants and expert witnesses to facilitate the development of corporate strategy and to support the presentation of positions before the PUCN. In this assignment, he represented the company on multiple occasions on television, taped and live radio, in press conferences and interviews, in consumer focus groups, and in presentations to large commercial and industrial customers.

Was one of only several advisors to the CEO that directly participated with the CEOs from both NPC and Sierra Pacific Resources in the final legislative negotiations on the merger of the two companies and associated restructuring legislation.

Participated in senior management discussions, as a member of the CEO's staff, on corporate strategy prior to the merger announcement and throughout the merger integration process, including development of corporate strategy and business line focus for the combined company.

In his other assignments at NPC, Mr. Etheridge:

Directed a department responsible for rate design studies, marginal cost-of-service studies, the annualization of sales and revenues for general rate case applications, demand-side pricing, economic and load forecasting, tariff administration, wholesale pricing, and development of supporting testimony in these areas. Built a cohesive, progressive thinking team with expertise in multiple disciplines that was well respected throughout the company.

Made multiple presentations to executives and groups of large commercial and industrial customers on a variety of industry issues. Interacted with multiple customers served at transmission voltages.

Worked with Mirage Resorts, Inc. (Mirage Resorts) to conceive of and have constructed a transmission voltage delivery system to a customer-owned, gas-insulated substation at the Bellagio Hotel & Casino. Several other large hotels and casinos subsequently also implemented transmission voltage delivery systems.

Represented the company in negotiations with customers considering alternative sources of supply. Negotiated an eight-year retail power purchase contract with Mirage Resorts to keep them from building a distributed generation project. Regularly briefed the Board of Directors during negotiations and gained Board approval for the final contract. Acted as a spokesperson on television and in the press on this highly publicized contract.

Professional Experience (cont'd)

Acted as the lead in the development of economic forecasts, econometric load forecasts, weather normalization of sales and peak demand, short-term sales forecasts, and testimony in these areas.

Expert Testimony

Before the New Jersey Board of Public Utilities, Docket No. WR19121516 (July and September 2020), on behalf of the Joint Municipal Intervenors. The testimony addressed return on equity, post-test year capital investments, and various revenue requirement issues.

Before the Massachusetts Department of Public Utilities (MDPU), Docket DPU 19-120 (March and May 2020), on behalf of the Massachusetts Office of the Attorney General. The testimony addressed performance metrics in the context of a performance-based ratemaking proposal and a geothermal network demonstration project.

Before the Maryland Public Service Commission (MPSC), Case No. 9471 (April and May 2019), on behalf of the Maryland Department of Natural Resources (DNR). The testimony addressed the need for, and alternatives to, two proposed 230-kV transmission lines from southern Pennsylvania into northern Maryland.

Before the Delaware Public Service Commission (DPSC), Docket 17-1224 (May 2018), on behalf of the staff of the DPSC. The testimony addressed expansion area natural gas ratemaking and revenue requirements issues.

Before the Public Utility Commission of Texas (PUCT), Docket Nos. 47527 and 48440 (April and May 2018), on behalf of DOE. The testimony addressed cost allocation in Docket No. 47527 and a billing dispute regarding a customer-owned wind farm and transmission infrastructure in Docket No. 48440.

Before the Indiana Utility Regulatory Commission (IRUC), Cause No. 44967 (November 2017), on behalf of the Indiana Office of Utility Consumer Counselor (OUCC). The testimony addressed distribution operations and maintenance cost benchmarking.

Before the MDPU, Docket DPU 15-181 (June and July 2016), on behalf of the Massachusetts Office of the Attorney General. The testimony addressed various issues regarding a proposed interstate pipeline expansion from both shareholder and ratepayer perspectives.

Before the MPSC, Case No. 9393 (May 2016 and June 2016), on behalf of the DNR. The testimony addressed the need for, and alternatives to, a proposed 138-kV transmission line in eastern Maryland.

Before the IRUC, Cause No. 44688 (January 2016), on behalf of the OUCC. The testimony addressed operations and maintenance cost benchmarking and another revenue requirement issue.

Expert Testimony (cont'd)

Before the PUCT, Docket No. 43695 (May and June 2015), on behalf of DOE. The testimony addressed operations and maintenance cost benchmarking and rate design issues.

Before the Missouri Public Service Commission, Case No. ER-2012-0174 (August and October 2012), on behalf of DOE. The testimony addressed off-system sales margins.

Before the PUCT, Docket No. 39896 (March and April 2012), on behalf of DOE. The testimony addressed rate design issues relevant to DOE's Strategic Petroleum Reserve.

Before the Illinois Commerce Commission (ICC), Docket No. 11-0721 (February 2012), on behalf of DOE. The testimony addressed proposed distribution loss factors for end-use customers receiving service at transmission voltages.

Before the PUCN, Docket No. 11-06006 (October 2011), on behalf of DOE. The testimony addressed NPC's proposed class revenue requirement allocation with respect to DOE's NNSS and the U.S. Air Force's Nellis Air Force Base (Nellis AFB).

Before the Wyoming Public Service Commission, Docket No. 20000-384-ER-10 (May 2011), on behalf of DOE. The testimony addressed class cost-of-service proposals.

Before the IRUC, Cause No. 38707 FAC87 (March 2011), on behalf of the OUCC. The testimony provided comments on Duke Energy Indiana's electric hedging policy.

Before the IRUC, Cause No. 43849 (November 2010), on behalf of the OUCC. The testimony provided comments on an electric hedging policy proposed by the Northern Indiana Public Service Company.

Before the ICC, Docket No. 10-0467 (November and December 2010), on behalf of DOE. The testimony addressed proposed distribution loss factors for end-use customers receiving service at transmission voltage.

Before the MPSC, Case No. 9179 (December 2009), on behalf of the DNR. The testimony addressed the need for a proposed 500-kV transmission line in eastern Maryland and alternatives.

Before the PUCN, Docket No. 08-12002 (April and May 2009), on behalf of DOE. The testimony addressed NPC's proposed class revenue requirement allocation with respect to the NNSS and Nellis AFB.

Before the MPSC, Case No. 9165 (March 2009), on behalf of the DNR. The testimony addressed a proposed 230-kV transmission line in southern Maryland and alternatives.

Expert Testimony (cont'd)

Before the PUCN, Docket No. 06-11022 (March 2007), on behalf of DOE. The testimony addressed NPC's proposed class revenue requirement allocation with respect to the NNSS and Nellis AFB.

On Behalf of NPC:

Before the PUCN, Docket No. 99-7035 (February 2000). The testimony addressed the issue of splitting purchased power capacity payments out of deferred energy cases and into general rate cases for cost recovery purposes.

Before the Nevada Legislature, Senate Commerce and Labor Committee (March 1999). The testimony responded to questions on deregulation.

Before the PUCN, Docket No. 98-12009 (December 1998 and June 1999). The testimony addressed steps being taken to establish an arms-length affiliate to provide potentially competitive services.

Before the PUCN, Docket No. 97-8001 (September 1997). The testimony addressed NPC's efforts to address restructuring issues and cost unbundling issues.

Before the PUCN, Docket No. 97-7030 (July 1997). The testimony addressed matching deferred energy rates with rapidly changing deferred energy balances given upward swings in market prices for fuel and purchased energy.

Before the Nevada Legislature, Senate Commerce and Labor Committee (February 1997). The testimony addressed rates during hearings on deregulation.

Before the Public Service Commission of Nevada (PSCN), Docket No. 96-10005 (February 1997). Testimony in this gas utility's filing for approval of a residential gas air conditioning rate schedule addressed the potential benefits of pricing strategies that support technological innovation.

Before the PSCN, Docket No. 96-7020 (July 1996). The testimony addressed competition, marginal costs, confidentiality issues, and rate design in support of NPC's largest ever-proposed rate reductions for large customers.

Before the PSCN, Docket No. 95-6076 (February 1996). The testimony addressed line extension policies in the context of competition and with respect to marginal costs.

Before the PSCN, Docket No. 95-8038 (November 1995 and January 1996). The testimony addressed a proposal to serve the NNSS under a new partial requirements rate schedule.

Expert Testimony (cont'd)

Before the PSCN, Docket No. 95-7021 (July 1995 and November 1995). The testimony addressed a request to implement improved cost allocation procedures for calculating base tariff energy rates across rate classes.

Before the PSCN, Docket No. 95-4061 (July 1995). The testimony addressed competition, negotiations, and cost studies that supported a proposed service agreement with Mirage Resorts to prevent the customer from pursuing distributed generation.

Before the PSCN, Docket No. 94-7001 (February 1995). The testimony addressed load forecasting, competition, long-term avoided costs, and econometric modeling in a refiled resource planning case.

Before the PSCN, Docket No. 94-4085 (October 1994). The testimony addressed marginal costs relative to line extensions in a case involving a proposed line extension rule modification.

Before the PSCN, Docket No. 94-7001 (July 1994 and August 1994). The testimony addressed economic and load forecasting issues in a resource planning case.

Before the PSCN, Docket No. 93-11045 (June 1994). The testimony addressed rate design and cost of service in an over-earnings investigation.

Before the PSCN, Docket No. 92-9055 (January 1994). The testimony addressed the impact of lost sales to the NNSS on remaining retail customers in a complaint case brought by a rural cooperative over service to Yucca Mountain that was to be located at the NNSS.

Before the PSCN, Docket No. 92-1067 (January 1992). The testimony addressed rate design and cost of service in a general rate case.

Before the PSCN, Docket No. 91-5055 (May 1991). The testimony addressed rate design and cost of service in a general rate case.

Before the PSCN, Docket No. 88-701 (July 1988). The testimony addressed economic and load forecasting issues in a resource planning case.

1 BEFORE THE PUBLIC SERVICE COMMISSION
2 OF MARYLAND
3 APPLICATION OF TRANSOURCE MARYLAND, :
4 LLC FOR A CERTIFICATE OF PUBLIC :
5 CONVENIENCE AND NECESSITY TO :
6 CONSTRUCT TWO NEW 230 kV : Case No.:
7 TRANSMISSION LINES ASSOCIATED WITH : 9471
8 THE INDEPENDENCE ENERGY CONNECTION :
9 PROJECT IN PORTIONS OF HARFORD :
10 AND WASHINGTON COUNTIES, MARYLAND :

11 -----

12

13 Deposition of DWIGHT A. ETHERIDGE, was
14 taken on Thursday, May 16, 2019, commencing at
15 9:04 a.m., at Venable, LLP, 750 East Pratt Street,
16 Suite 900, Baltimore, Maryland, before MICHELE D.
17 LAMBIE, Notary Public.

18 -----

19

20 Reported By:

21 Michele D. Lambie, CSR-RPR

1 APPEARANCES:

2 ON BEHALF OF TRANSOURCE MARYLAND, LLC:

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21

1 APPEARANCES CONTINUED:

2 ON BEHALF OF DEPARTMENT OF NATURAL
3 RESOURCES POWER PLANT RESEARCH PROGRAM:

4 Maryland Energy Administration

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1 P R O C E E D I N G S

2 DWIGHT D. ETHERIDGE

3 the Deponent, called for examination by Transource
4 Maryland, LLC, being first duly sworn to tell the
5 truth, the whole truth, and nothing but the truth,
6 testified as follows:

7 EXAMINATION

8 BY MR. GUNDERSON:

9 Q. All right. Good morning, Mr. Etheridge.
10 My name is Chris Gunderson. I represent Transource
11 in this case, and I'll be taking your deposition
12 this morning.

13 A. Very good.

14 Q. Have you ever been deposed before?

15 A. I have, yes.

16 Q. So, obviously, you understand how this
17 all works then. The court reporter is going to be
18 taking down everything that we say. Because she's
19 taking down everything we say, it's important that
20 you allow me to finish my question before you start
21 your answer so that we don't talk over each other.

1 A. Yes.

2 Q. We just did, and if you don't understand
3 a question or a part of my question, then please
4 let me know what you don't understand so we can get
5 on the same page; is that fair?

6 A. Yes.

7 Q. Okay. And this isn't a marathon, so if
8 you need to take a break, just let me know, and
9 we'll take a break, okay?

10 A. Yes.

11 Q. All right. So throughout the course of
12 the deposition, I'm going to refer to a host of
13 defined terms that were defined in your testimony;
14 things like Transource, PJM, Project 9A, the IEC
15 project. To the extent that I'm referring to those
16 terms, I'm referring to them as you've defined them
17 in your testimony.

18 If you have any questions whatsoever
19 about what I'm asking about, you know, let me know,
20 and we can clarify it to make sure we're on the
21 same page, okay?

1 A. That's fine.

2 Q. You're here today testifying on behalf of
3 PPRP; is that correct?

4 A. That's correct.

5 Q. Briefly go through some of your
6 background. What is your educational history?

7 A. I have a Bachelor's of Science Degree in
8 business administration from the University of
9 California, Berkeley.

10 Q. Did you -- while you were in college, did
11 you take any courses in engineering?

12 A. I did not take any courses in
13 engineering.

14 Q. Did you take any courses -- and
15 since -- I'll include since the time you have left
16 college as well, have you taken any courses in
17 engineering?

18 A. I have not taken any courses in
19 engineering, no.

20 Q. Have you taken any courses in electrical
21 engineering?

1 A. I have not taken courses in electrical
2 engineering.

3 Q. Have you taken any courses in systems
4 planning?

5 A. I have not taken any courses in systems
6 planning.

7 Q. Have you taken any courses in
8 transmission planning?

9 A. I have not taken any courses in
10 transmission planning.

11 Q. When you were at Nevada Power Company,
12 what was your role?

13 A. It was a diverse role. I started out in
14 resource planning as a load forecaster. In that
15 role, I interacted with all of the folks in
16 resource planning.

17 About the '91 time frame, I believe, I
18 moved over to the rates department, and in the
19 rates department, I had various responsibilities
20 related to rate cases, but it was primarily focused
21 on cost-of-service studies. So, I would interact

1 with all sorts of folks in the preparation of those
2 studies.

3 As I advanced in the rates department and
4 in -- within the company, I then moved on, and at
5 one point, I was reporting to the vice-president of
6 distribution services. And in that particular
7 role, I was interacting with multiple engineers of
8 distribution systems, substations, and such.

9 Then in about the -- or while in that
10 role, I really became first involved in
11 transmission planning, and that was related to
12 determining transmission service to the Bellagio
13 Hotel. And then after that, I moved on to become
14 the leader of the industry restructuring team,
15 where I was reporting directly to the CEO. And,
16 really, from the time that I was in the rates
17 department as the director of rates, I had a
18 transmission engineer that I hired that worked for
19 me.

20 When I was on the industry restructuring
21 team, I had a transmission -- or another engineer.

1 He was primarily focused on the power plants and
2 such and reported to me, and then I reported to the
3 CEO. And during the transition, I reported to a
4 different CEO. He was an engineer, Mike Niggli.
5 And thereafter, then I was working on strategic
6 projects after the merger of Sierra Pacific and
7 Nevada Power Company, I believe, in the 1999 time
8 frame and a variety of projects,
9 telecommunications, resource planning, and just
10 some other strategy projects.

11 And I did do a, a merger and acquisition
12 in there for Nevada Power and Sierra Pacific about
13 Portland Gas and Electric, or at least we had a
14 definitive agreement to do so.

15 Q. Okay. During your time at Nevada Power
16 Company and, I guess, Sierra Pacific
17 Resources -- is that the company that was formed
18 after the merger?

19 A. It was. It was the holding company, yes.

20 Q. During your time there, did you work
21 on -- did you study electric markets in any of

1 your -- in any of your positions?

2 A. I did study the development of electric
3 markets in the context primarily of preparing for
4 industry restructuring.

5 So, we had legislation that was pushing
6 industry restructuring, and one of the primary
7 reasons that legislation was pushing industry
8 restructuring was related to the California market,
9 to the west, and so it would have been in the
10 context of a study in the California marketplace
11 that was probably most relevant to the question
12 posed.

13 Q. When you say restructuring, are you
14 referring to restructuring of the -- or developing
15 a competitive wholesale market and a competitive
16 retail market?

17 A. It would have been -- in the state of
18 Nevada, we were looking to deregulate the retail
19 market, and that was the effort that I was leading
20 for the company. And in the case of California,
21 you also had competitive markets at the retail

1 level, but you also had a developing wholesale
2 market. And that was at the time when they had
3 the -- the two entities, the CAISO zone, and I
4 forget the name of the other, that was running the
5 marketplace that eventually went defunct.

6 Q. When you were working to -- working on
7 the restructuring, was it important to that process
8 to have a, a robust, fair wholesale market to
9 support a competitive retail market?

10 A. Could you restate so I'm sure that we're
11 talking about which market? Is it the Nevada
12 market?

13 Q. Yes.

14 A. Yes. I'm sorry. With regard to the
15 Nevada market and the question posed, was it
16 important to have a robust wholesale market, the
17 interesting feature there was really the issue of
18 whether to divest generation or not and how that
19 might stimulate the development of the marketplace.
20 So, I think that's most responsive to the question
21 that you have posed, and it was a very significant

1 issue in the state.

2 Q. And was it also a significant issue to
3 ensure that the retail market had access to fair
4 prices throughout the wholesale market?

5 A. I don't believe so. I believe that
6 different people involved in the process, different
7 market participants had different ideas as to the
8 importance of generation divestiture in terms of,
9 shall we say, would it jump start retail
10 competition, or was it significantly important
11 enough to get resale or retail competition going in
12 the state of Nevada. So, you'd have thinkers on
13 both sides of the issue as regards to that topic.

14 Q. Who was on the side of ensuring that the
15 retail market had access to fair prices throughout
16 the wholesale market?

17 A. The Public Utilities Commission of Nevada
18 and -- led by the chairperson, Judy Sheldrew,
19 Chairman Sheldrew, was one of the big proponents of
20 divestiture, and -- and certainly their job is to
21 ensure that rates are just and reasonable and the

1 various regulations that they promulgate --
2 promulgate, in fact, have a potential to accomplish
3 that.

4 Q. Since after you left Sierra Pacific
5 Resources, did you immediately go into consulting?

6 A. After a very short break.

7 Q. Okay. But your next position was in
8 consulting, correct?

9 A. It was as an independent consultant.

10 Q. And since the time that you have been an
11 independent consultant, do you have any
12 non-testifying experience with transmission
13 planning?

14 A. I do.

15 Q. And what is that?

16 A. One of the first key issues where I got
17 involved in the transmission planning as a
18 consultant was work that I was doing for the
19 Department of Energy, and that work involved
20 helping the Department of Energy figure out a
21 transmission delivery system to serve Yucca

1 Mountain.

2 I was very familiar with the transmission
3 systems in the area from my work with Nevada Power
4 Company and the years I've been dealing with large
5 transmission -- or large transmission voltage
6 customers, so on that particular project, I was the
7 principal investigator and drafted the report for
8 options the DOE could consider to bring in
9 transmission voltage lines in to serve Yucca
10 Mountain.

11 And I actually had the benefit of one of
12 the few people who got to look in Yucca Mountain
13 with that project. That was the first that I was
14 involved with DOE on a transmission project I
15 believe.

16 Q. So, was your involvement in the sighting
17 of the line or identification of
18 option -- electrical options? What was the
19 particular aspect of your role?

20 MS. MCLEMORE: Objection. Compound.

21 BY MR. GUNDERSON:

1 Q. You can answer.

2 A. The objective of the study that I
3 prepared was to determine options DOE had for
4 bringing transmission voltage lines up to the
5 proximate location of the north shaft of Yucca
6 Mountain, and so it involved looking at
7 transmission lines in the area, looking at how
8 those lines could be tapped, looking at routes to
9 bring the transmission lines on property in
10 withdrawn land up to the Yucca Mountain project
11 itself, and then interconnecting to the planned
12 distribution facilities that DOE was contemplating
13 at the time.

14 Q. And what was the -- why was that
15 transmission line needed?

16 A. The transmission line was needed because
17 the infrastructure in the area didn't have the
18 capacity to bring in the projected loads for Yucca
19 Mountain, so we needed an incremental transmission
20 capacity to get the power up to Yucca Mountain that
21 it needed.

1 Q. Was that for -- to resolve reliability
2 violations?

3 A. It wasn't to resolve reliability
4 violations, no. It was simply you didn't have
5 infrastructure sufficient to address the loads, so
6 you had to bring new infrastructure in.

7 Q. Was it addressing congestion on the
8 system?

9 A. It was not addressing congestion on the
10 system, no.

11 Q. Okay. And besides that project, anything
12 else where you had non-testifying experience with
13 transmission planning?

14 A. I was the principal investigator for
15 helping DOE determine how to right size the
16 transmission infrastructure to serve the Paducah
17 Gaseous Diffusion Plant just west of Paducah,
18 Kentucky.

19 Q. And what was your specific task in that
20 assignment?

21 A. The task in the assignment was trying to

1 help DOE determine how to move from the status quo,
2 which is a situation where there were approximately
3 17,061 kV transmission lines coming in to serve a
4 facility that used to have approximately 2,000
5 megawatts load and now was expected to have loads
6 in the 50 megawatt range or less, and so it was
7 trying to unwind four different electrical
8 switchyards that previously had served the gaseous
9 diffusion plant.

10 And it involved three separate utilities;
11 Electrical Energy, Inc., and TVA and Kentucky
12 Utilities, all of which had transmission lines
13 interconnected in those four switchyards.

14 Q. Okay. And any other assignments besides
15 those two?

16 A. I -- while having not written a report, I
17 investigated for DOE options for reconfiguring the
18 transmission system to serve the Portsmouth Gaseous
19 Diffusion Plant just outside of Piketon, Ohio.

20 This was a situation where we had at one
21 point, I believe, ten incoming 345s to two

1 different switchyards that served that particular
2 facility.

3 The northern switchyard was
4 decommissioned, and we only had the western
5 switchyard. And at that switchyard, we had OVEC
6 with four lines, a 345, DOE with one 345 tie line
7 up to the Don Marquis Substation, and my support
8 was helping them figure out what other options were
9 there to get out of these old facilities and to
10 right size the transmission delivery system to that
11 particular DOE facility.

12 Q. All right. Anything else?

13 A. I was lead consultant from Exeter
14 supporting the Savannah River site and its
15 interactions with South Carolina Electric & Gas,
16 and there's a transmission system that DOE owned at
17 the Savannah River site that had been leased to
18 SC&G under a long-term lease.

19 As part of that lease, we leased
20 substations when the power was transformed down to
21 the distribution voltage for the distribution

1 system that the DOE operated and managed at the
2 site, and so I have interacted with them
3 periodically in negotiations with utility on the
4 power supply contracts. And keep in mind, that's a
5 retail contract, but it also had terms and
6 conditions related to operation and maintenance of
7 DOE's owned substations and lines to ensure that
8 the work that SC&G was doing was reasonable.

9 Q. Okay. Any other assignments?

10 A. I have had other assignments with the
11 Department of Energy where I've had to investigate
12 transmission facilities less directly, but in
13 order to understand delivery systems to
14 the -- effectively my clients in the field, DOE
15 facilities, to understand how to interact with
16 utilities that were serving those particular DOE
17 facilities.

18 So, for example, I've studied at length
19 the delivery system to Los Alamos. I've studied
20 the delivery system to Sandia National Laboratory
21 outside of Albuquerque.

1 I support the Department of Energy Labs
2 in northern California, the Stanford Linear
3 Accelerator Center, Lawrence Berkeley National Lab,
4 Lawrence Livermore National Lab in terms of their
5 interactions with Pacific Gas and Electric and also
6 Western Area Power Administration regarding the
7 transmission lines owned by either that served
8 those DOE labs.

9 In addition, to add back to something
10 that I work on as a principal investigator, I was a
11 principal investigator from Exeter in terms of
12 developing transmission and distribution options
13 for serving Lawrence Livermore National
14 Laboratory's Site 300.

15 Site 300 is located to the east and is
16 involved in -- in weaponry, explosives, and we were
17 looking for an alternative way to bring power into
18 that particular site to increase the reliability of
19 service. So, I was the principal investigator in
20 that regard in that particular facility.

21 MR. GUNDERSON: Hi. Did somebody just

1 join the phone line?

2 MR. RAYKHER: Yes. This is Mike Raykher
3 from OPC.

4 MR. GUNDERSON: Thank you.

5 BY MR. GUNDERSON:

6 Q. When you -- you said you investigated
7 transmission facilities to understand delivery
8 systems. Can you -- what do you mean by to
9 understand delivery systems?

10 A. Sure. In the case of, for example, Los
11 Alamos, it's in a fairly remote location, and it
12 receives transmission voltage service from two
13 particular transmission lines.

14 The rating of the lines -- the lowest
15 rating of both -- the ratings of both lines are
16 important. The rating of the -- the lower line is
17 particularly important because of N-1 contingency.
18 That is the line that has the capability of serving
19 Los Alamos.

20 Los Alamos at one point had constructed a
21 combustion turbine and caused it to be built on

1 site as part of the overall reliability of service
2 to this very important nuclear facility and was
3 considering other things, and DOE, through the
4 Federal Energy Management Program, which is
5 effectively my client at Exeter, hired me to go out
6 and help DOE figure out how to view future supply
7 to Los Alamos.

8 And to do so, to understand power supply
9 to Los Alamos, you need to understand the delivery
10 system, and, again, Mr. Gunderson, we're talking
11 about a transmission voltage delivery system.

12 Q. What was DOE's role in -- in the -- in
13 the projects that you worked for DOE for? So, was
14 DOE providing comments to the regional transmission
15 organization? What was the purpose of your work?

16 A. The Federal Energy Management Program
17 within DOE has a responsibility to manage and
18 interact with DOE facilities around the country in
19 terms of their procurement of electricity.

20 My client is the Federal Energy
21 Management Program. To the extent a DOE facility

1 is looking at electricity matter where either a
2 principal at the laboratory or facility or FEMP
3 decides they would like to have Exeter support in
4 whatever that utility matter is, then they call me.

5 Effectively, then a task would be
6 assigned, and then I would begin work to support
7 DOE in that particular facility with FEMP as my
8 contract. And FEMP, again, is the Federal Energy
9 Management Program.

10 Q. And during the course of any of the
11 assignments that you have described this morning,
12 did you study congestion on transmission systems?

13 A. Not on the assignments that I have
14 mentioned to you just now, but as regards to the
15 three laboratories in northern California, the DOE
16 laboratories, Exeter supports those laboratories in
17 their procurement of power supply. And in doing
18 so, we do examine congestion in the California
19 market to determine where we're going to buy power
20 for the -- where we're going to recommend that DOE
21 buy power, the blocks of power they may buy, and

1 how to address all of the various aspects of
2 participation in the wholesale market in
3 California.

4 Q. And are you generally recommending that
5 DOE buy blocks of power from areas that are not
6 congested?

7 A. Congestion changes. So, when we put a
8 solicitation out or, rather, when we suggest to
9 Western Area Power Administration, our procurement
10 agent, to issue a solicitation, we will be looking
11 at offers and seeking offers of the
12 California-Oregon border or COB.

13 We'll also be seeking offers at 15, MP
14 15, Northern -- we'll just call it MP 15, because
15 those are two locations that are fairly liquid in
16 terms of power supply.

17 When we get our offers in after a
18 solicitation, we'll then evaluate and try and
19 determine which is the preferred purchase from
20 DOE's perspective, given our portfolio not only of
21 those purchases, but also our hydropower

1 allocation.

2 So, it would be looking at what's the
3 price at COB versus the price offered at MP 15?
4 What are the losses and congestion costs between
5 the two that would help us make a decision.

6 Q. And is it fair to say you're generally
7 looking to purchase power that has the least amount
8 of congestion costs related to it?

9 A. Not necessarily. There's other risks
10 that we have to deal with in that particular power
11 procurement. We have transmission rights on the
12 California-Oregon Transmission project from
13 northern -- from the California-Oregon border down
14 into the San Francisco Bay area, and those rights
15 can be curtailed depending on what might be going
16 on with system operations.

17 So, there's an element of risk that we
18 could lose effectively the pipe that allows us to
19 bring a block purchase down to our clients in the
20 Bay area, and we have to factor that into our
21 decision-making when we recommend to the client

1 what to do.

2 Q. All right. But factoring in that risk,
3 you would obviously look to purchase power that is
4 at the lowest price that you can obtain, correct?

5 A. The best value for the client --

6 Q. Right.

7 A. -- after adjusting for risk.

8 Q. Right. Okay. All right. Am I correct
9 that you are not an electrical engineer?

10 A. That's correct.

11 Q. And are you a licensed professional
12 engineer?

13 A. I am not.

14 Q. Have you been involved in any market
15 efficiency transmission projects?

16 A. Just this one.

17 Q. Have you ever served as a systems
18 planner?

19 A. I have not. I have been in quite a few
20 control rooms, but I have not served as a
21 system -- systems planner.

1 Q. And have you ever served as a
2 transmission planner, electrical transmission
3 planner?

4 A. To the extent we discussed before where I
5 would be involved in -- in -- for DOE developing
6 studies to suggest how they might receive service
7 to particular facilities, yes. To the extent I
8 worked with a financial representative from Mirage
9 Resorts to figure out a creative way to get power
10 delivered to Bellagio, effectively that's
11 transmission planning that he and I were doing.

12 Obviously, I would then go back and visit
13 with experts within Nevada Power Company, but quite
14 literally it is trying to plan a delivery system to
15 a transmission-voltage customer.

16 Q. But you've never been employed where your
17 specific role is transmission planning; is that
18 right?

19 A. That's correct.

20 Q. Have you ever consulted for a regulatory
21 agency on transmission projects?

1 A. The Colorado River Commission is one of
2 my clients. They have transmission voltage
3 facilities that serve the pumping stations and
4 treatment facilities that address water supply to
5 the Las Vegas Valley. I have interacted with that
6 client on transmission-related matters, but not in
7 the transmission planning function.

8 Q. Okay. Have you ever had a role where you
9 provided transmission planning services for a
10 regional transmission organization?

11 A. No.

12 Q. Have you had any assignments,
13 non-testifying assignments in regard to regional
14 transmission planning?

15 A. Mr. Gunderson, one of the things that we
16 haven't discussed so far this morning would have
17 been the work that I have done for PPRP, in
18 addition to work that I have done for DOE. We have
19 discussed at several points non-testifying
20 experience, so I have to broaden that up.

21 To the extent that PPRP would look at

1 some particular transmission issue or some PJM
2 issue at some point, since I've been consulting for
3 them for approximately the last 11 years, I may
4 have discussed various market issues with
5 individuals. I felt it important to add that, but
6 I don't recall specifically what we may have
7 discussed. But, obviously, given their interest in
8 the PJM marketplace, they may have turned to me at
9 some point in time to discuss PJM issues.

10 Q. But nothing that you can -- nothing
11 specifically that you can recall today?

12 A. I have participated, for example, in
13 various meetings with PEPCO and BG&E regarding
14 transmission projects over the last decade. That
15 participation would have been in meetings that PPRP
16 would have sponsored, where representatives of
17 those utilities would come in, and transmission
18 projects were then discussed with me in attendance.

19 Typically, what might follow would be a
20 request from PPRP to research the particular
21 transmission issue that was discussed.

1 To the extent some of those transmission
2 issues then did not move forward to the point that
3 it would have -- there would have been a CPCN
4 application, then it would have been a situation,
5 as you have asked, non-testimony type of
6 transmission-related work and RTO-related work.

7 Q. And do you recall if any of those
8 projects involved market efficiency transmission
9 projects?

10 A. None of them did.

11 MR. GUNDERSON: I guess we'll go ahead
12 and mark this.

13 (Whereupon, Etheridge Deposition Exhibit
14 1, Notice of Deposition, marked for
15 identification.)

16 BY MR. GUNDERSON:

17 Q. The court reporter has marked as
18 Deposition Exhibit 1 the Notice of Deposition for
19 your deposition here this morning. Do you
20 recognize this document?

21 A. I have not previously seen the

1 document, --

2 Q. Okay.

3 A. -- but I understand what it is.

4 Q. Understood. What did you do to prepare
5 for this morning's deposition?

6 A. I read the testimony, the rebuttal
7 testimony of Transource. I read the rebuttal
8 testimony of the staff witness and OPC's witness.
9 I read my testimony. I prepared an errata on my
10 testimony in preparation for the deposition.

11 I reviewed discovery that Transource had
12 submitted to PPRP, and yesterday I did go down to
13 Annapolis to visit with my Counsel.

14 Q. Was anyone else at the meeting yesterday
15 besides your attorneys?

16 A. Yes, there were.

17 Q. Who else was present?

18 A. Fred Kelley, David Tancabel.

19 MR. KELLEY: Tancabel.

20 THE WITNESS: Connie Faustini, and I
21 believe that was it.

1 BY MR. GUNDERSON:

2 Q. Okay.

3 A. And David was not there the entire time.

4 Q. About how long did that meeting last?

5 A. The meeting lasted from 9:45 till

6 1:00 p.m. 9:45 a.m. to 1:00 p.m.

7 Q. During the course of your preparation for
8 this deposition, did you review any documents that
9 refreshed your recollection as to matters that you
10 addressed in your testimony?

11 A. I did.

12 Q. Which documents refreshed your
13 recollection?

14 A. In preparing the errata, I went through
15 the -- the footnotes throughout my testimony, and
16 then I -- I went back and looked at the source
17 document, and in some cases, I corrected a page of
18 such. So, really it was to ensure the accuracy of
19 the information that I was using for my testimony.
20 It would be to check that source documentation
21 throughout the testimony.

1 Q. All right. Anything else?

2 A. Given that I knew of the deposition for
3 several weeks, one cannot help but think about it
4 and -- and look at materials that may have been
5 scattered on my desk.

6 Q. But nothing, in particular, that you can
7 recall that refreshed your memory on anything?

8 A. With that said, there was an expansive
9 potential set of information, given as large a case
10 as it is, so I think that's sufficient for now.

11 Q. Did you speak with anyone outside of PPL
12 prior to today's deposition? For example -- I'm
13 sorry. Outside of PPRP? For example, PPL or BGE?

14 A. In related to prep- -- preparations for
15 the deposition was the context of the question?

16 Q. Yes.

17 A. No.

18 Q. Did you speak with any other of the
19 witnesses that have provided testimony related to
20 this project?

21 A. In preparing for the deposition, the only

1 other witness that provided testimony that I talked
2 with would have been Mr. Fred Kelley.

3 Q. Okay. When did you first become aware of
4 PJM's selection of Project 9A?

5 A. It would have been when I reviewed
6 Transource's application in this case.

7 Q. When were you retained by PPRP for this
8 matter?

9 A. While not particularly important in
10 answering, I just want to clarify that Exeter has a
11 contract with the Power Plant Research Program. I
12 don't manage that particular contract, and so
13 retained is not, per se, a document so much as
14 someone.

15 For example, the project manager at
16 Exeter receives a call, we need help with
17 something, and so then I would be notified. I
18 would talk with the client, and that would
19 effectively start my engagement.

20 Q. Okay. And so when did you receive that
21 phone call?

1 A. I really don't recall. The filing was
2 made, of this application, I believe in December
3 2018.

4 Q. '17.

5 A. Correct. December 2017, and so I started
6 to work on this project. And from memory, I do
7 believe I actually had hours devoted to this
8 project in January of 2018.

9 Q. Okay. As you developed your opinions in
10 this case, who did you consult with to help you
11 develop your opinions?

12 MS. McLEMORE: Objection. Form. You can
13 answer. I'm sorry.

14 THE WITNESS: Okay. I did consult with
15 George Owens. George Owens is an engineer. It's a
16 subcontractor of Exeter. His firm has since closed
17 business, but I did discuss the Transource project,
18 the IEC project with him I believe in maybe one or
19 two phone calls, and that would have been very
20 early on in the January or February 2018 time
21 frame.

1 I have discussed the Transource project
2 with Kevin Porter. Kevin Porter is a principal at
3 Exeter, and he manages the PPRP contract. And I've
4 discussed the Transource project with some of the
5 individuals that you see here, and that would be
6 it.

7 BY MR. GUNDERSON:

8 Q. Okay. So, what was the topic area of
9 your discussions with Mr. Owens?

10 A. Mr. Owens was familiar with -- because of
11 his work with other clients, Mr. Owens was familiar
12 with the western portion of the IEC project, that
13 particular geographic area, and I discussed with
14 him what he thought of the particular project. And
15 he did say that, you know, that's an area where it
16 appeared to him that there was a need for
17 transmission. And I asked him about the eastern
18 side of the IEC project, and he said less familiar
19 area with a particular need in that area.

20 I did at one point ask him about,
21 Mr. Owens, is there potential lead increase

1 throughput on the existing facility, and he said
2 you can always put higher capacity conductors on
3 facilities. So, that was just a discussion that we
4 had. And really, thereafter it was primarily my
5 own work. I didn't engage him to follow up and
6 support.

7 Q. Did Mr. Owens -- in your conversation
8 with Mr. Owens, did it influence your opinions in
9 this case?

10 A. Yes.

11 Q. In what way?

12 A. I took him at his word as one source of
13 input. As I had mentioned previously, that he
14 thought there was a need for transmission
15 geographically similar to where the western segment
16 of the IEC project is located.

17 Whenever you listen to input as you try
18 to formulate an opinion, that input then is in your
19 mind. It will be given some sense of -- of
20 thought -- weight, rather, as you develop your own
21 ideas, and the concept that there's the potential

1 to use higher capacity conductors simply stuck in
2 my mind as something that was retained to think
3 about as I move forth in developing my thoughts on
4 the project.

5 Q. And how about your conversations with
6 Mr. Porter, what was the topic of those
7 conversations?

8 A. The topic of those conversations was that
9 this was a very interesting project, interesting as
10 regards to the value proposition in Pennsylvania,
11 interesting as regards to the existing
12 under-utilized transmission infrastructure located
13 near the IEC's project, and just interesting
14 overall as this was the first ever market
15 efficiency project that's before the commission.

16 It didn't -- our discussions did not get
17 into the substance of my testimony, per se. It was
18 really just as he's the project manager, how is it
19 going?

20 Q. Okay. Did Mr. Porter's comments
21 influence your opinions in this case?

1 A. No.

2 Q. Going back to Mr. Owens. You mentioned
3 that he is or was an engineer. Can you give some
4 more background on Mr. Owens?

5 MS. McLEMORE: Objection. Form.

6 BY MR. GUNDERSON:

7 Q. You can answer.

8 A. Mr. Owens is an electrical engineer,
9 probably about 40 plus years of experience. He had
10 other electrical engineers that were working at his
11 firm, Downes Associates, Inc. D-O-W-N-E-S,
12 Associates, Inc.

13 I had worked with George and also Allen
14 Todd for quite a few years. I first met Allen in
15 about the 2008 time frame when we were working on
16 the MAPP project, I believe, or the PATH project.
17 I think it was the PATH project, but I also used
18 the engineers at Downes to help me with my DOE
19 work, and so I've interacted with George
20 periodically since I came to Exeter back in 2006.

21 Q. All right. You mentioned that Mr. Owens

1 was familiar with the western portion of the IEC
2 project. Do you know why he thought that there was
3 a need for extra transmission capacity in that
4 area?

5 A. I only know that he had said in the
6 conversation that there's probably a need or
7 something to that effect for transmission where the
8 western portion of the IEC project is located. And
9 thereafter I got out my PJM map, and I looked to
10 see what George was suggesting. But it -- his
11 response -- his suggestion wasn't, these are the
12 reasons why it's needed. Just that it looked like
13 it was needed.

14 Q. Okay. And do you know why he was
15 familiar with the western portion?

16 A. I believe he was familiar with the
17 western portion, more so than the east, because of
18 one of his clients, and I may have mentioned this
19 earlier. I believe it might have been a
20 municipality somewhere in that general vicinity,
21 and it may have been in the Pennsylvania area or

1 Maryland. I'm simply not sure, but it suggested,
2 given that interaction with that client, a greater
3 familiarity with the electrical system near
4 geographically to the IEC-West project.

5 Q. And do you know whether Mr. Owens had
6 performed any studying of the areas around the
7 IEC-East project?

8 MS. McLEMORE: Form.

9 BY MR. GUNDERSON:

10 Q. You can answer.

11 A. I don't know if he performed any studies
12 of the area around the IEC-West project. Likewise,
13 I don't know if he performed any studies around the
14 IEC-East project. It was simply his general
15 familiarity more so with the west, but also his
16 interaction with PJM, which he's interacted with
17 PJM for an extensive period of time throughout his
18 career.

19 Q. Do you share his opinion that you can
20 always put higher capacity conductors on existing
21 facilities?

1 A. To the extent to which you can put higher
2 capacity conductors on existing facilities depends
3 on the facilities and the conductor.

4 Q. So, you agree there can be limits to
5 that?

6 A. Absolutely. You need to know the
7 capabilities of the structures and the conductors
8 that you're looking to put on those particular
9 structures.

10 Q. Have you discussed your opinions in this
11 case with any other party in this case or a witness
12 who is testifying for a party in this case?

13 A. I had a telephone call with staff. The
14 telephone call with staff was to discuss the
15 conceptual alternatives. I forget whom, but I
16 believe there were two individuals on that call,
17 and that was just for me to explain to them that I
18 was looking at these conceptual alternatives, and
19 that would have been the conceptual alternatives in
20 addition and after we had looked at Conceptual
21 Alternative 1.

1 Q. Okay. And was there any information that
2 was provided to you on that call that influenced
3 your opinions in this case?

4 A. No. The audience listened.

5 Q. All right. Other than staff, have you
6 discussed your opinions with any other party or
7 witness in this case?

8 A. I was on a phone call with Mr. Weber
9 discussing conceptual alternatives from Transource.
10 In that context, one could say that he's a witness.
11 I'm a witness. We discussed the topic of my
12 testimony, but more directly to your question, the
13 answer would be, no.

14 Q. Have you discussed your opinions with any
15 party or witness in the Pennsylvania case, the
16 Pennsylvania Transource case?

17 A. No. Not directly, no.

18 Q. Why do you say not directly?

19 A. I say that because to the extent I
20 received an email from my lawyer and I responded
21 with a thought that might have been related to

1 somebody else either in this case or the
2 Pennsylvania case, then I responded to my lawyer.

3 Q. Okay.

4 A. But it's not communicating with any of
5 these other individuals. It's simply she's asking
6 me a question. I'm responding back with my
7 thoughts to her on the question she may have posed.

8 Q. Did you obtain any information from
9 parties or witnesses in the Pennsylvania case that
10 influenced your opinions in this case?

11 A. There was testimony by Peter Lanzalotta
12 that influenced my testimony in this case. I had
13 seen discussions by certain individuals. It might
14 have been public or property owners or such or
15 emails, press correspondence or something that
16 really for the sole issue, in response to your
17 question, was there's infrastructure up here
18 geographically close to the IEC's project, and that
19 influenced me.

20 Q. All right. Have you discussed your
21 opinions in this case with anyone at PPL?

1 A. No.

2 Q. Have you discussed your opinions in this
3 case with anyone at BGE?

4 A. No.

5 Q. Have you discussed your opinions in this
6 case with anyone at PJM?

7 A. Similar to what I said about Mr. Weber,
8 there was a PJM representative on the phone when we
9 discussed conceptual alternatives two, three, and
10 four that occurred, I believe, towards the end of
11 January. In that regard, yes. Otherwise, no, I
12 have not communicated with PJM regarding my
13 opinions in this case.

14 Q. Have you -- have you reviewed the
15 testimony of OPC's witness, Mr. Smith, in this
16 case?

17 A. Yes, I have.

18 Q. Is there anything in Mr. Smith's
19 testimony that you disagree with?

20 A. It's so broad based, the length of that
21 testimony, can you cite me to something more

1 specific?

2 Q. Well --

3 A. To fairly answer the question, I'm going
4 to have to go back and start reading.

5 Q. Okay.

6 A. I do have a copy of his testimony,
7 Mr. Gunderson.

8 MR. GUNDERSON: I have copies.

9 (Whereupon, Etheridge Deposition Exhibit
10 2, Direct Testimony of Douglas A. Smith, marked for
11 identification.)

12 BY MR. GUNDERSON:

13 Q. All right. I guess I would first direct
14 you -- I'm sorry.

15 The court reporter has marked as
16 Deposition Exhibit 2 the direct testimony of
17 Douglas A. Smith in Case Number 9471. Do you
18 recognize Exhibit 2, Mr. Etheridge?

19 A. I do.

20 Q. And is this the testimony of Mr. Smith
21 that you've reviewed?

1 A. It is.

2 Q. I'll direct you to pages 3 and 4 where
3 Mr. Smith summarizes his conclusions and
4 recommendations. Is there anything on these pages
5 that you disagree with?

6 A. Mr. Gunderson, we'll go from line 9 on
7 page 3 to line 2 on page 4; is that the question?

8 Q. Yes.

9 A. Okay.

10 (Whereupon, there was a pause for
11 document examination.)

12 THE WITNESS: And, again, the question
13 is, is there anything that I don't agree with?

14 BY MR. GUNDERSON:

15 Q. Correct.

16 A. I don't necessarily agree that -- and
17 this is on line 16 through line 19 -- the stark
18 drop in congestion costs and the impact of
19 additional generation (as implied by the
20 differential treatment of generation in subsequent
21 project evaluations) suggest that the market

1 activity is working to address, or at least
2 materially reduce, the original need.

3 There's a lot of information that's in
4 that particular statement, a comparison of
5 historical and future congestion, a comparison of
6 generating units in and not in a particular
7 analysis, but the stark drop really jumps out at
8 me.

9 I think back to the fact that in 2014, we
10 had a polar vortex, and I know that there's been
11 other weather-related events, I believe, in maybe
12 January of 2018 as I've been studying markets that
13 significantly play into congestion, and with that
14 proviso, that, you know, one really needs to look
15 at history almost from a normalized perspective
16 before we start making inferences, that jumped out
17 at me.

18 Q. Anything else on -- in that answer that
19 you disagree with?

20 A. As I move to line 20, again, the falling
21 congestion, I have not studied, per se, the falling

1 congestion, other than I've looked at historical
2 congestion to try and gain an understanding of
3 the -- the issue at hand in this case, which
4 clearly involves, amongst other things, congestion,
5 and so the statement falling congestion implies
6 something definitive, and I haven't formulated
7 necessarily that same opinion.

8 Q. Is it your opinion that congestion is not
9 falling?

10 A. I haven't formulated an opinion in terms
11 of whether congestion is falling or not. In terms
12 of historical congestion, it has changed over time.
13 It has been influenced by weather.

14 For example, in 2014, that was very much
15 a weather-related event in historical congestion,
16 and I think, Mr. Gunderson, it's also important
17 that we put into context our discussion congestion
18 as you have been talking about it with me now is
19 too broad based to be relevant.

20 We should probably be focusing on, for
21 example, what I have testified on and others, the

1 congestion in the BG&E, Dominion, PEPCO zones is
2 pretty much related to AP-South, and so the context
3 of everything I've said so far was my study of
4 congestion in those areas and not elsewhere.

5 Q. Right. Okay.

6 MS. McLEMORE: It might be about time for
7 our first break, if that's okay.

8 MR. GUNDERSON: Sure. Let's take five
9 minutes.

10 MS. McLEMORE: That sounds good.

11 (Recess taken -- 10:06 a.m.)

12 (After recess -- 10:15 a.m.)

13 BY MR. GUNDERSON:

14 Q. Mr. Etheridge, I believe where we
15 finished was the last bullet point on page 3 of
16 Mr. Smith's testimony. If you'd look at -- is
17 there anything else that you disagreed with on
18 those bullet points?

19 (Whereupon, there was a pause for
20 document examination.)

21 THE WITNESS: No.

1 BY MR. GUNDERSON:

2 Q. Okay. And then if you look on page 4,
3 Mr. Smith has additional summary or testimony where
4 he summarizes some of his opinions. Is there
5 anything on page 4 that you disagree with?

6 (Whereupon, there was a pause for
7 document examination.)

8 THE WITNESS: The only thing that I
9 question is the word insufficient. The PJM process
10 is insufficient, because that's a statement that is
11 very broad based in nature. It's not specific to
12 this project.

13 BY MR. GUNDERSON:

14 Q. Anything else?

15 (Whereupon, there was a pause for
16 document examination.)

17 THE WITNESS: Mr. Smith's statement,
18 beginning on line 14 through line 16, involves a
19 recommendation that a finding be made regarding
20 congestion. I have not, other than to look at
21 historical congestion and be mindful of the fact

1 that there's a discussion of congestion, formulated
2 an opinion, so I can't agree, or necessarily
3 disagree, with that particular line in his
4 testimony.

5 BY MR. GUNDERSON:

6 Q. Anything else?

7 A. No.

8 Q. If you turn to page 41 of Mr. Smith's
9 testimony, he states at line 11, however, based on
10 the analysis presented in this proceeding, it is
11 apparent that generation options could provide
12 congestion relief benefits similar to the
13 transmission solution. Do you have an opinion on
14 that, on Mr. Smith's opinion?

15 A. Similar is vague. Because it's vague,
16 it's difficult to answer the question that you've
17 posed. I agree with Mr. Smith that generation
18 options can provide congestion relief, just as
19 transmission enhancements or expansions can provide
20 congestion relief.

21 Q. Okay. But you don't have an opinion as

1 to whether generation options are likely to provide
2 congestion relief benefits similar to the
3 congestion relief benefits that PJM has projected
4 for Project 9A?

5 MS. McLEMORE: Form.

6 THE WITNESS: It would be very difficult
7 for me at this moment to speculate as to whether or
8 not generation could similarly provide congestion
9 benefits as the IEC project, because we're talking
10 about a project that's likely to be in service for
11 50 plus years. So, it quite could be similar, but
12 it might not be similar given the length of time
13 over which the question is posed.

14 BY MR. GUNDERSON:

15 Q. Okay. Have you studied that -- that
16 issue or that angle of this? Have you studied
17 whether there are congestion options that are
18 likely to provide congestion relief benefits
19 similar to the benefits that PJM projects for
20 Project 9A?

21 A. In listening, I wasn't sure if you had

1 said generation options similar to the benefits of
2 Project 9A.

3 Q. Okay. Yeah, I may have misspoke. That's
4 what I meant.

5 A. I have not studied generation options for
6 reducing congestion beyond my understanding that
7 clearly they can if placed in the right locations.

8 Q. Is there anything else in Mr. Smith's
9 testimony in this case that sticks out to you that
10 you disagree with that we haven't already covered?

11 MS. MCLEMORE: Objection. Form.

12 (Whereupon, there was a pause for
13 document examination.)

14 THE WITNESS: On page 10, on line 3,
15 Mr. -- Mr. Smith speaks to PJM examined congestion
16 issues affecting the four 500 kV transmission lines
17 that make up the AP-South Interface. PJM was
18 addressing more than the AP-South Interface. It
19 was also addressing the AEP-DOM Interface or
20 AEP-DOM Interface as it was grouping projects.

21 And so in that regard, much of my

1 testimony has addressed both interfaces; whereas,
2 Mr. Smith has only addressed one. Not particularly
3 a large issue, but, again, both interfaces were
4 important to the group one selections that PJM had.

5 (Whereupon, there was a pause for
6 document examination.)

7 THE WITNESS: Page 32, lines 8 through
8 11, the statement is suggestion that after the 2014
9 spike, either the drivers of congestion or the
10 market responded to those signals either through
11 reduced demand or new generation resources. I
12 don't necessarily agree, having not necessarily
13 studied what happened historically between the
14 spike in 2014 and the subsequent years thereafter
15 to make this statement, even though it's just a
16 suggestion.

17 (Whereupon, there was a pause for
18 document examination.)

19 THE WITNESS: On page 40, beginning on
20 line 7, because this testimony was filed prior to
21 rebuttal, obviously there's been a change, and PJM

1 has done some analyses of the costs and benefits of
2 Conceptual Alternative 3A, as they call it.

3 (Whereupon, there was a pause for
4 document examination.)

5 THE WITNESS: Similarly -- similarly on
6 page 41, there's a statement beginning on line 1,
7 and it reflects a change in time between when the
8 statement was made.

9 (Whereupon, there was a pause for
10 document examination.)

11 THE WITNESS: On page 41, line 14,
12 there's the use of the word similar that we
13 discussed before. My answer is the same as before.

14 (Whereupon, there was a pause for
15 document examination.)

16 THE WITNESS: On page 42, there's a
17 statement, the market has -- this is on line 15.
18 The market has and continues to respond to the need
19 identified by PJM. It's my position that the
20 market responds to price signals, but the direct
21 link from the market response to price signals or

1 market participant's response to price signals
2 isn't necessarily a direct link to need identified
3 by PJM, which is to reduce congestion. I can't
4 make that statement, other than I know market
5 participants react to prices.

6 (Whereupon, there was a pause for
7 document examination.)

8 THE WITNESS: On page 43, on lines 12 and
9 13, I don't believe the PJM process is
10 insufficient, looking back at line 11, simply
11 because it doesn't present a calculation.

12 (Whereupon, there was a pause for
13 document examination.)

14 THE WITNESS: On line 15, there's a word,
15 fully. It's vague, so it's difficult for me to
16 agree with that sentence.

17 On line 17, I agree that the process
18 doesn't quantify the risk to Maryland ratepayers,
19 but PJM's market efficiency process does consider
20 risk to the extent that it uses a 1.25 b-c ratio as
21 a threshold.

1 (Whereupon, there was a pause for
2 document examination.)

3 THE WITNESS: I tried my best to review
4 all of this without --

5 BY MR. GUNDERSON:

6 Q. Sure.

7 A. -- infringing upon your time. I don't
8 think I have anything else, but, again, subject to
9 a check.

10 Q. Understood. Thank you. I just wanted to
11 clarify when you were talking about the -- on page
12 42, line 15, the link between responsive price
13 signals and the need identified by PJM, is it -- is
14 what you're saying -- is it your opinion that
15 generation developers respond to price signals?
16 They don't gener- -- they don't develop generation
17 in order to reduce congestion?

18 MS. McLEMORE: Form. Objection. Form.

19 THE WITNESS: Yes. They -- yes.

20 BY MR. GUNDERSON:

21 Q. Okay. Staff witness, Mr. Austin, have

1 you reviewed his testimony?

2 A. I have, yes.

3 Q. Is there anything that you've disagreed
4 in Mr. Smith's testimony -- I mean Austin's
5 testimony?

6 MS. McLEMORE: Objection. Form.

7 THE WITNESS: Might you have an exhibit?

8 BY MR. GUNDERSON:

9 Q. I do.

10 (Whereupon, Etheridge Deposition Exhibit
11 3, Direct Testimony and Exhibits of Roger Austin,
12 marked for identification.)

13 BY MR. GUNDERSON:

14 Q. All right. The court reporter has marked
15 as Deposition Exhibit 3 the direct testimony and
16 exhibits of Roger Austin in Case Number 9471.

17 Do you recognize Exhibit 3 as the
18 testimony of Mr. Austin that you have reviewed?

19 A. I do.

20 Q. I guess it's most efficient to do the
21 same thing, just start with Mr. Austin's summary of

1 his conclusions and recommendations. If you'll
2 turn to page 2, starting at line 13, and then going
3 down to -- over to page 3, to line 21, is there
4 anything in that -- those passages that you
5 disagree with?

6 (Whereupon, there was a pause for
7 document examination.)

8 THE WITNESS: On line 20, Mr. Austin uses
9 the word relieving. On page 21, Mr. Austin uses
10 the word or the phrase south of the AP-South
11 Reactive Interface. Relieving could be taken in
12 the context of resolving, meaning there's no
13 congestion left. So, reducing is something I would
14 agree with. Relieving I can't agree with.

15 It is my understanding the AEP-DOM
16 Interface geographically located south of the
17 AP-South Interface facilities, I'm not sure what
18 Mr. Austin means by south of the AP-South.

19 On page 3, there's the word unnecessary.
20 Unnecessary has different meanings, and there's an
21 element of time involved. Without Project 9A,

1 there were liability violations that need to be
2 solved, and so there's that element of timing
3 involved. So, I wouldn't use the word unnecessary.

4 On lines 3 through 8, I have not verified
5 Mr. Austin's calculations of net benefits with
6 Mr. Smith's calculations as a part of development
7 of my testimony. I've simply read them, so I can't
8 necessarily agree with either witnesses'
9 calculations.

10 Page 11 -- I'm quite sorry.

11 BY MR. GUNDERSON:

12 Q. That's all right. Page 3?

13 A. Page 3, line 11. Mr. Austin uses the
14 term solve; I would not.

15 Q. Would you replace that with reduce?

16 A. I would.

17 (Whereupon, there was a pause for
18 document examination.)

19 THE WITNESS: That's all that I would
20 disagree with on those two pages.

21 BY MR. GUNDERSON:

1 Q. Okay. And is there anything else in
2 Mr. Smith's testimony that jumped out to you when
3 you reviewed it that you disagreed with?

4 MS. McLEMORE: Objection. Form.

5 BY MR. GUNDERSON:

6 Q. Sorry. Mr. Austin. Is there anything
7 else in Mr. Austin's testimony that jumped out to
8 you when you reviewed it that you disagreed with?

9 A. One moment.

10 (Whereupon, there was a pause for
11 document examination.)

12 THE WITNESS: On page 5, beginning on
13 lines 17 and for several lines thereafter, the
14 discussion is limited to the AP-South Reactive
15 Interface, and it was more expansive, in fact, in
16 terms of what PJM was attempting to address.

17 (Whereupon, there was a pause for
18 document examination.)

19 THE WITNESS: On line -- page 7, line 9
20 through 11, I do not know if, in fact, PJM
21 coordinates with this PJM Interconnection Analysis

1 Group. PJM models and follows its modeling
2 protocols, so I don't know what coordinate means.

3 It suggests picking and choosing. To the
4 extent it's just verifying the status of any
5 particular project, that I would understand, but
6 I'm just not sure what's meant there.

7 (Whereupon, there was a pause for
8 document examination.)

9 THE WITNESS: Page 9, lines 1 through 3,
10 in this context, measures, demand response
11 programs, and so on can reduce congestion, that I
12 agree with.

13 At present, as I've testified, there's a
14 need for transmission for reliability reasons.
15 These programs can't address that need because of
16 the time frame we're talking about. The time frame
17 being that we've identified a generation
18 deliverability overload without Project 9A in the
19 year 2023. They may, but I would not say that they
20 would be able to negate a need for some incremental
21 transmission because that would be inconsistent

1 with what I've testified.

2 (Whereupon, there was a pause for
3 document examination.)

4 THE WITNESS: Page 11, lines 19 through
5 23 --

6 MR. CURRAN: Dwight, can we take one
7 second? I'm sorry.

8 MS. SCHIPPER: Did someone just join a
9 few minutes ago?

10 MR. TALSON: Yes. Steve Talson.

11 MS. SCHIPPER: I think someone is typing.
12 If they wouldn't mind going on mute, whoever that
13 is.

14 MR. RAYKHER: Yes. That's probably me.
15 Hold on.

16 MS. SCHIPPER: Thank you.

17 MR. RAYKHER: I'm typing down everything
18 you say.

19 MR. GUNDERSON: We have a court reporter.

20 MR. RAYKHER: Thank you.

21 THE WITNESS: Previously I referred to

1 page 11, lines 19 to 23. There's the phrase, would
2 duplicate on line 20, and on line 21 with --
3 there's the phrase, without the need. I can't
4 connect those two. And in PPRP'S conceptual
5 alternatives, there was a source. That source was
6 the Furnace Run Substation, and in Mr. Lanzalotta's
7 alternatives, it did not include that source. And
8 that's where I can't link with duplicating without
9 the need.

10 On page 12, lines 3 through 5, the use of
11 the term or the word, would, on line 3 suggests a
12 definitive determination has been made, and I can't
13 make that definitive determination. Could would be
14 better.

15 (Whereupon, there was a pause for
16 document examination.)

17 THE WITNESS: On page 12, line 6, there's
18 the word, address. Address is a synonym for
19 resolve. I can't use that word because PJM was
20 attempting to reduce.

21 On line -- page 12, lines 19 through 22,

1 this is, in effect, repeating a quote from one of
2 the Transource DRs. I forget which one. It may
3 have been in set five when it was originally put
4 forth, and that's Transource's opinion of looking
5 at alternatives in the concept of PJM's market
6 efficiency process. I don't agree that that has to
7 be followed necessarily looking at alternatives.

8 (Whereupon, there was a pause for
9 document examination.)

10 THE WITNESS: Page 12, line 24 through
11 26, it's important dealing with the answers I just
12 gave that they're in the context of how Mr. Austin
13 is referring to a LanzaLotta option and a PPL
14 option as opposed to PPRP'S conceptual
15 alternatives, but it's presumptuous on lines 24,
16 25, and 26 and even discussing the violations
17 before that necessarily as to whether PPL's
18 proposal would have created those violations and
19 not moved forward had it been evaluated back with
20 the topology that was studied in the 2014/2015 time
21 frame. So, we have an element of time where this

1 answer doesn't necessarily coincide with what's
2 said there on lines 24 through 26.

3 Page 14, line 3, again, Mr. Austin uses
4 address, and I can't use address for the reasons
5 previously stated.

6 Likewise, I cannot -- if I were to change
7 that to contribute to resolving, or contribute to
8 reducing the effects of the reliability violation,
9 could I answer? No.

10 On page 14, lines 17 through 20, there's
11 an element of time and the change in topology, so I
12 can't agree with that statement.

13 That same statement is made beginning on
14 line 23, and it continues to line 2 on page 15.
15 Again, I can't agree with that.

16 (Whereupon, there was a pause for
17 document examination.)

18 THE WITNESS: On page 15, lines 14
19 through 19, I don't disagree with the statement in
20 terms of the sufficiency of the data, but, again, I
21 point out we've got a topology change. So, you're

1 talking apples to oranges, and that's within a
2 single sentence.

3 On page 17, line 18, when I saw the
4 docket numbers that Mr. Austin listed, I went back
5 and checked what I thought the docket before was
6 listed at in terms of its numbering, and I didn't
7 see these dockets.

8 Towards the end of the testimony is the
9 docket that I had seen, and that's relevant to this
10 topic.

11 (Whereupon, there was a pause for
12 document examination.)

13 THE WITNESS: Again, I have not verified
14 Mr. Smith's or Mr. Austin's calculations, for
15 example, 20 -- page 20 and so on, so I can't
16 necessarily agree or state that I disagree with
17 him.

18 Again, page 22, it's the same point on
19 line 17; relieving. It will not relieve. It will
20 only reduce.

21 On page 23, again, I can't verify the

1 numbers in Mr. Austin's calculations.

2 (Whereupon, there was a pause for
3 document examination.)

4 THE WITNESS: And subject to check again
5 without doing this several times over, that's my
6 best answer to the question you posed.

7 BY MR. GUNDERSON:

8 Q. Thank you. I know you haven't checked
9 the calculations that Mr. Austin has provided in
10 his testimony. Do you -- do you have an opinion on
11 whether it is appropriate for the commission to
12 consider the -- or to isolate the benefits to the
13 cost ratios or the amounts for specific zones in
14 Maryland as opposed to the broader region?

15 MS. McLEMORE: Objection. Form.

16 THE WITNESS: Yes.

17 BY MR. GUNDERSON:

18 Q. What's your opinion? What is your
19 opinion?

20 A. As you stated in your question, the
21 commission should consider that.

1 Q. Okay.

2 A. That's what I responded yes to.

3 Q. Why do you think the commission should
4 consider that?

5 A. It's an element of the economics of a
6 proposal brought before them.

7 Q. That's fine. Do you think the commission
8 should also consider the benefits provided to the
9 PJM transmission system as a whole?

10 MS. McLEMORE: Objection. Form.

11 THE WITNESS: You'd have to define
12 benefits for me to answer that question.

13 BY MR. GUNDERSON:

14 Q. We'll just stick to the benefits
15 in -- that -- that PJM calculates in its
16 benefits-to-cost ratio.

17 A. The benefits it calculates in its
18 benefit-cost ratio are the net reduction in load
19 payments, the net present value of the reduction
20 load payments for zones throughout PJM. So, in
21 light of that, your question, sir?

1 Q. Do you think the commission should
2 consider those benefits to the system as a whole
3 when it's evaluating this project?

4 A. Is it those -- by those benefits, are you
5 referring to the benefits, either positive or
6 negative, in each zone with your question?

7 Q. The -- should -- Mr. Austin takes the
8 benefits -- the net-load payment benefits for the
9 zones in Maryland to calculate a per-customer
10 number, divides it by the number of customers in
11 those zones to provide a calculation, correct?

12 A. He looks at areas where Maryland is part
13 of a zone.

14 Q. Correct.

15 A. Not the zones in Maryland. You could say
16 it that way, but he has simply looked at PEPCO and
17 BG&E. Dominion, no. PEPCO, BG&E, and DPL,
18 and -- and AEP, APS. That changes depending on the
19 document. Because those zones have areas within
20 Maryland, it's reasonable to look at them, as he
21 did.

1 Q. Okay. And do you think the commission
2 should go beyond Maryland and evaluate benefits
3 that are provided to the PJM zones outside of
4 Maryland?

5 MS. McLEMORE: Objection. Form.

6 BY MR. GUNDERSON:

7 Q. You can answer.

8 A. I believe that the commission should be
9 cognizant of bigger-picture items when it thinks
10 about rendering a decision. I don't think
11 necessarily that limiting the input that one uses
12 to make a decision necessarily leads to good
13 decision-making.

14 Q. Okay. Do you agree that regional
15 transmission organizations should consider
16 transmission upgrades to address persistent
17 congestion on the system?

18 A. Yes.

19 Q. How do you define persistent congestion?

20 A. I don't have a specific definition of
21 persistent, and it may change with the interface.

1 So, there would be factors that would go into how I
2 might define it.

3 Q. Okay. Do you agree that it was
4 appropriate for PJM to open a competitive window to
5 address congestion on the AP-South Reactive
6 Interface and related facilities?

7 A. I believe it was appropriate for PJM to
8 open a market solicitation or its long-term
9 solicitation for proposals to address both the
10 AP-South and AEP-DOM, because they're related
11 interfaces.

12 The reason I say that is I don't, from
13 what I have read, think it's appropriate simply
14 necessarily to open the AP-South as you stated, nor
15 have I gone back to evaluate what would be perfect,
16 but I just wanted to clarify that.

17 Q. Sure. Do you agree then that the
18 congestion that has been historically seen on the
19 AP-South Reactive Interface and the AEP-DOM
20 Interface has been persistent?

21 A. I'm not necessarily going to say

1 persistent. The reason I say that is that when I
2 did look back at some of the interfaces and
3 historical congestion and in terms of which
4 interface was ranked, for example, one, two, or
5 three of the top 20 in PJM's rankings that you can
6 get from market monitoring information, that there
7 would be movement, and I believe at one point,
8 AP-South may have dropped. AEP-DOM may have
9 dropped materially when you look at history.

10 And in that regard, one needs to be
11 careful necessarily with inferences you make along
12 with the word persistent. It doesn't mean that
13 it's something that you couldn't pursue, but,
14 again, history, you have to be mindful of what that
15 historical data is actually telling you about.
16 Will it be persistent in the future or likely be
17 persistent?

18 Q. Do you agree that the congestion -- that
19 there is congestion on transmission facilities in
20 the BGE zone?

21 A. I have seen historical congestion cost

1 estimates from PJM market monitoring reports on
2 BG -- BG&E facilities, yes. Transmission
3 facilities.

4 Q. And is the congestion that you've seen in
5 the -- on the BGE transmission facilities, do you
6 agree that that congestion or it's reasonable for
7 PJM to address resolving that or, to use your
8 word -- what was your word? Reducing that
9 congestion?

10 A. I have not examined what became -- I have
11 looked at, but I haven't examined the rationale for
12 the different elements of the BGE transmission
13 system that PJM was addressing in a subsequent
14 long-term market efficiency window.

15 I have seen, because of the number of
16 years that I've examined the market monitoring
17 reports, that certain elements within the BGE
18 transmission system had congestion in a given year
19 and didn't thereafter.

20 The other thing is you've got congestion
21 not only related to weather, but outages, as you're

1 rebuilding something, that wouldn't necessarily
2 tell you about congestion in the future.

3 Having not done that, I have not looked
4 specifically at PJM's rationale for each particular
5 element of BGE's transmission system that, A, may
6 have congestion on it; and, B, may warrant
7 attention as part of the market efficiency process.

8 Q. Are you familiar with the recent levels
9 of congestion that has been experienced on BGE's
10 Peach Bottom to Conastone --

11 MS. McLEMORE: Objection.

12 BY MR. GUNDERSON:

13 Q. -- 500 kV line?

14 MS. McLEMORE: Objection. Form.

15 THE WITNESS: Other than an awareness
16 that that particular facility has been listed in
17 recent documents, I'm not aware of specific
18 congestion that has been either documented
19 historically or potentially projected by PJM.

20 However, it may have been addressed, for
21 example, in market drivers for the most recent

1 long-term market efficiency window. There's a
2 familiarity there, but not as to the specific
3 congestion that you asked.

4 BY MR. GUNDERSON:

5 Q. All right. So, do you have an opinion as
6 to whether it is reasonable for PJM to seek
7 solutions to address the congestion that has been
8 experienced on BGE's Peach Bottom to Conastone
9 line?

10 A. I don't have -- I have not formulated an
11 opinion.

12 Q. Are you aware that Maryland's electric
13 retail supply market is deregulated?

14 A. I am aware of that, yes.

15 Q. Do you agree that retail electric
16 customers in Maryland have the right to choose
17 their electric supplier?

18 A. Yes.

19 Q. And --

20 A. One --

21 Q. Go ahead.