

**Jonathan A. Lesser, Ph.D.**  
**President**

**SUMMARY OF EXPERIENCE**

Dr. Jonathan Lesser is the President of Continental Economics, Inc., and has over 30 years of experience working for regulated utilities, governments, and as an economic consultant. He has extensive experience in valuation and damages analysis, from estimating the damages associated with breaking commercial leases to valuing nuclear power plants. Dr. Lesser has performed due diligence studies for investment banks, testified on generating plant stranded costs, assessed damages in commercial litigation cases, and performed statistical analysis for class certification. He has also served as an arbiter in commercial damages proceedings.

He has analyzed economic and regulatory issues affecting the energy industry, including cost-benefit analysis of transmission, generation, and distribution investment, gas and electric utility structure and operations, generating asset valuation under uncertainty, mergers and acquisitions, cost allocation and rate design, resource investment decision strategies, utility financing and the cost of capital, depreciation, risk management, incentive regulation, economic impact studies of energy infrastructure development, and general regulatory policy.

Dr. Lesser has prepared expert testimony and reports in cases before utility commissions in numerous US states; before the US Federal Energy Regulatory Commission (FERC); before international regulators in Latin America and the Caribbean; and in commercial litigation cases. He has also testified before the U.S. Congress, and legislative committees in numerous states on energy policy and market issues. Dr. Lesser has also served as an independent arbiter in disputes involving regulatory treatment of utilities and valuation of energy generation assets.

Dr. Lesser is the author of numerous academic and trade press articles. He is the coauthor of *Environmental Economics and Policy* (1997), *Principles of Utility Corporate Finance* (2011), and *Fundamentals of Energy Regulation* (2007; 2d ed., 2013). He is also a contributing columnist and Editorial Board member for *Natural Gas & Electricity*. Dr. Lesser is currently serving a three-year term as one of the Energy Bar Association "Deans" overseeing education programs on regulatory and ratemaking concepts.

## **AREAS OF EXPERTISE**

- State, federal, and international electric rate regulation—cost of capital, depreciation, cost of service, cost allocation, pricing and rate design, incentive regulation, regulatory policy, wholesale and retail market design, and industry restructuring
- Cost-benefit analysis, asset valuation, and cost-effectiveness analysis of regulatory programs
- Commercial damages estimation and litigation
- Natural gas and oil pipeline rate regulation
- Natural gas markets
- Economic impact analysis and input-output studies
- Environmental policy and analysis
- Market power analysis
- Load forecasting and energy market modeling
- Market valuation and due diligence
- Antitrust

## **EDUCATION**

- PhD, Economics, University of Washington, 1989
- MA, Economics, University of Washington, 1982
- BSc, Mathematics and Economics (with honors), University of New Mexico, 1980

## **EMPLOYMENT HISTORY**

- 2009–Present: Continental Economics, Inc., President.
- 2004–2009: Bates White, LLC, Partner, Energy Practice.
- 2003–2004: Vermont Dept. of Public Service, Director of Planning.
- 1998–2003: Navigant Consulting, Senior Managing Economist.
- 1996–1998: Adjunct Lecturer, School of Business, University of Vermont.
- 1993–1998: Green Mountain Power Corporation, Manager, Economic Analysis.
- 1990–1993: Adjunct Lecturer, Dept. of Business and Economics, Saint Martin's College.

- 1986–1993: Washington State Energy Office, Energy Policy Specialist.
- 1984–1986: Pacific Northwest Utilities Conference Committee, Energy Economist.
- 1983–1984: Idaho Power Corporation, Load Forecasting Analyst.

## **SELECTED EXPERT TESTIMONY AND REPORTS**

### **Confidential Client**

- ♦ FERC proceeding, Office of Enforcement  
Subject: Alleged market manipulation in the PJM energy market

### **Mainline Shippers Group**

- ♦ FERC proceeding (*Re: Gulf South Pipe Line Company, LP*, Docket No. RP15-65-000  
Subject: Allowed rate of return and capital structure.

### **Exelon Corporation**

- ♦ FERC proceeding (*Re: PJM Interconnection, LLC*, Docket No. ER15-623-000  
Subject: Redesign of PJM forward capacity market to incorporate Capacity Performance resources.

### **Indicated Shippers of California**

- ♦ Proceedings before the California Public Utilities Commission (*Re: Pacific Gas and Electric Company*, Application No. 13-12-012 and Investigation 14-06-016 (risk management procedures for PG&E's natural gas transmission facilities and reasonableness of revenue requirement)

### **Utah Industrial Energy Consumers**

- ♦ Proceeding before the Utah Public Service Commission (*Re: Rocky Mountain Power Corporation*, Docket Nos. 13-035-184 and 13-034-196 (revenue requirement, cost allocation, and design of back-up service rates)

### **Paiute Pipeline Company**

- ♦ FERC rate proceeding (*Re: Paiute Pipeline Company*, Docket No. RP14-540-000)  
Subject: Natural gas supplies and depreciation rates for transmission, storage, and general plant accounts.

### **Energy Michigan**

- ◆ Proceeding before the Michigan Public Utilities Commission (*Re: Consumers Energy Corporation*, Case No. U-17429)

Subject: Certificate of Convenience and Necessity for Consumers Power combined-cycle generating plant.

### **Constellation New Energy Inc. and Exelon Generation Company, LLC**

- ◆ Proceeding before the Ohio Public Utilities Commission (*Re: Columbus Southern Power Company and Ohio Power Company*, Case Nos. 12-3254-EL-UNC)

Subject: Design of competitive auction process and rate blending for AEP Ohio.

### **Shell Energy North America, LP**

- ◆ FERC proceeding regarding natural gas pipeline fuel cost allocation (*Re: Rockies Express Pipeline, LLC*, Docket Nos. RP11-1844-000 & RP12-399-000)

Subject: Economic appropriateness of roll-in treatment of “lost and unaccountable” fuel

### **New York Association of Public Utilities**

- ◆ FERC proceeding regarding formula transmission rate for Niagara Mohawk Power d/b/a National Grid (*Niagara Mohawk Power Co.*, Docket No. EL14-29-000)
- ◆ FERC proceeding regarding formula transmission rate for Niagara Mohawk Power d/b/a National Grid (*Niagara Mohawk Power Co.*, Docket No. EL12-101-000)

Subject: Allowed rate of return and capital structure

### **Caribbean Utilities Company, Ltd.**

- ◆ Rebuttal report on weighted average cost of capital methodology and recommendations for Caribbean Utilities Company, Ltd.

### **Utah Industrial Energy Users Coalition**

- ◆ Proceeding before the Utah Public Service Commission (*Re: Rocky Mountain Power Corp.*, Case No. U-11035-200 )

Subject: Appropriate methodology for embedded cost allocation for Rocky Mountain Power.

**FirstEnergy Solutions Corp.**

- ◆ Proceeding before the Ohio Public Utilities Commission (Case Nos. 12-2400-EL-UNC)

Subject: Just and reasonableness of Duke Energy Ohio cost-recovery mechanism for capacity resources.

- ◆ Proceeding before the Ohio Public Utilities Commission (Case Nos. 12-426-EL-SSO)

Subject: Dayton Power & Light Co., Electric Security Plan; financial integrity, anticompetitive cross-subsidization and need for structural separation

- ◆ Proceeding before the Michigan Public Service Commission (Case No. U-17032)

Subject: Indiana & Michigan Power Co. proposed capacity charges for customers taking retail electric service.

- ◆ Proceeding before the Ohio Public Utilities Commission (Case Nos. 11-346-EL-SSO and 11-348-EL-SSO)

Subject: Revised AEP Ohio energy security plan, benefits of retail market competition.

- ◆ Proceeding before the Ohio Public Utilities Commission (Case No. 10-2929-EL-UNC)

Subject: Appropriate price for commercial retail electric suppliers to be charged by AEP Ohio for installed capacity under the PJM Fixed Resource Requirement tariff option.

**Southwestern Electric Cooperative**

- ◆ FERC proceeding regarding wholesale distribution rate application of Ameren Illinois (*Re: Midwestern ISO and Ameren Illinois*, Docket No. ER11-2777-002, et al.)

Subject: Allowed rate of return and capital structure

### **Exelon Corporation**

- ◆ Proceeding before the New Jersey Board of Public Utilities (Docket No. EO-11050309)

Subject: PJM Capacity Market, Capacity Procurement, and Transmission Planning

### **Industrial Energy Users of Ohio**

- ◆ Proceeding before the Ohio Public Utilities Commission (Case No. 08-917-EL-SSO)

Subject: Determination of cost associated with “provider-of-last-resort” (POLR) service and AEP Ohio’s use of option pricing models.

### **Southwest Gas Corporation**

- ◆ FERC proceeding regarding rate application of El Paso Natural Gas Company (Docket No. RP10-1398-000)

Subject: Development of risk-sharing methodology for unsubscribed and discount capacity costs.

### **Portland Natural Gas Shippers**

- ◆ FERC rate proceeding regarding the rate application by Northern Border Pipeline Company (Re: Portland Natural Gas Transmission System, Docket No. RP10-729-000)
- ◆ FERC rate proceeding regarding the rate application by Northern Border Pipeline Company (Re: Portland Natural Gas Transmission System, Docket No. RP08-306-000)

Subject: Natural gas supplies, economic lifetime, and depreciation rates.

### **Independent Power Producers of New York**

- ◆ FERC proceeding (New York Independent System Operator, Inc., Docket No. ER11-2224-000)

Subject: Reasonableness of the proposed installed capacity demand curves and cost of new entry values proposed by the New York Independent System Operator.

### **Maryland Public Service Commission**

- ◆ Merger application of FirstEnergy Corporation and Allegheny Energy, Inc. (I/M/O FirstEnergy Corp and Allegheny Energy, Inc., Case No. 9233)

Subject: Proposed merger between FirstEnergy Corporation and Allegheny Energy. Testimony described the structure and results of a cost-benefit analysis to determine whether the proposed merger met the state's positive benefits test, and included analysis of market power and merger synergies.

### **Alliance to Protect Nantucket Sound**

- ◆ Proceeding before the Massachusetts Department of Public Utilities (Case No. D.P.U. 10-54)

Subject: Approval of Proposed Long-Term Contracts for Renewable Energy With Cape Wind Associates, LLC.

### **Brookfield Energy Marketing, LLC**

- ◆ FERC proceeding (*New England Power Generators Association, et al. v. ISO New England, Inc.*, Docket Nos. ER10-787-000, ER10-50-000, and EL10-57-000 (consolidated)).

Subject: Proposed forward capacity market payments for imported capacity into ISO-NE.

### **Public Service Company of New Mexico**

- ◆ Proceeding before the New Mexico Public Regulation Commission (Case No. 10-00086-UT)

Subject: Load forecast for future test year, residential price elasticity study.

### **M-S-R Public Power Agency**

- ◆ FERC proceeding (*Southern California Edison Co.*, Docket No. ER09-187-000 and ER10-160-000)

Subject: Allowed rate of return for construction work in progress (CWIP) expenditures for certain transmission facilities.

- ◆ FERC proceeding (*Southern California Edison Co.*, Docket No. ER10-160-000)

Subject: Allowed rate of return for construction work in progress (CWIP) expenditures for certain transmission facilities.

### **Financial Marketers**

- ◆ FERC proceeding (*Black Oak Energy, LLC v PJM Interconnection, L.L.C.*, Docket No. EL08-014-002)

Subject: Allocation of surplus transmission line losses under the PJM tariff.

### **Southwest Gas Corporation and Salt River Project**

- ◆ FERC proceeding regarding rate application of El Paso Natural Gas Company (Docket No. RP08-426-000)

Subject: Analysis of proposed capital structure and recommended capital structure adjustments

### **New York Regional Interconnect, Inc.**

- ◆ Proceeding before the New York Public Service Commission (Case No. 06-T-0650)

Subject: Analysis of economic and public policy benefits of a proposed high-voltage transmission line.

### **Occidental Chemical Corporation**

- ◆ FERC Proceeding (*Westar Energy, Inc.* ER07-1344-000)

Subject: Compliance of wholesale power sales agreement with FERC standards

### **EPIC Merchant Energy, LLC, et al.**

- ◆ FERC Proceeding (*Ameren Services Company v. Midwest Independent System Operator, Inc.*, Docket Nos. EL07-86-000, EL07-88-000, EL07-92-000 (Consolidated))

Subject: Allocation of revenue sufficiency guarantee costs.

### **Cottonwood Energy, LP**

- ◆ Proceeding before the Public Utility Commission of Texas (*Application of Kelson Transmission Company, LLC for a Certificate of Convenience and Necessity for the Amended Proposed Canal to Deweyville 345 kV Transmission Line with Chambers,*

*Hardin, Jasper, Jefferson, Liberty, Newton, and Orange Counties*, Docket No. 34611,  
SOAH Docket No. 473-08-3341)

Subject: Benefits of transmission capacity investments.

### **Redbud Energy, LP**

- ◆ Proceeding before the Oklahoma Corporation Commission (*Request of Public Service Company of Oklahoma for the Oklahoma Corporation Commission to Retain an Independent Evaluator*, Cause No. PUD 200700418)

Subject: Reasonableness of PSO's 2008 RFP design.

### **The NRG Companies**

- ◆ FERC Proceeding (*ISO New England Inc. and New England Power Pool*, Docket No. ER08-1209-000)

Subject: Compensation of Rejected De-list Bids Under ISO-NE's Forward Capacity Market Design

### **Dynegy Power Marketing, LLC**

- FERC proceeding, *KeySpan-Ravenswood, LLC v. New York Independent System Operator, Inc.*, Docket No. EL05-17-000

Subject: Estimation of damages accruing to Dynegy arising from a failure by the NYISO to accurately calculate locational installed capacity requirements in NYISO during the summer of 2002.

### **Constellation Energy Group**

- ◆ FERC proceeding (*Maryland Public Utility Commission, et al., v. PJM Interconnection, LLC*, Docket No. EL08-67-000)

Subject: "Just and reasonableness" of PJM's Reliability Pricing Mechanism.

### **Government of Belize, Public Utility Commission**

- ◆ Proceeding before the Belize Public Utility Commission, *In the Matter of the Public Utilities Commission Initial Decision in the 2008 Annual Review Proceeding for Belize Electricity Limited*.

Subject: Arbitration and Independent Expert's report, in dispute between the Belize PUC and Belize Electricity Limited in an annual electric rate tariff review, as required under Belize law.

### **Federal Energy Regulatory Commission**

- ◆ Technical hearings on wholesale electric capacity market design.

Subject: Analysis of proposal to revise RTO capacity market design developed by the American Forest and Paper Association.

### **Dogwood Energy, LLC**

- Proceeding before the Missouri Public Service Commission, *In the Matter of the Application of Aquila, Inc., d/b/a Aquila Networks - MPS and Aquila Case No. EO-2008-0046, Networks - L&P for Authority to Transfer Operational Control of Certain Transmission Assets to the Midwest Independent Transmission System Operator, Inc.*, Case No. EO-2008-0046.

Subject: Cost-benefit analysis to determine whether Aquila should join either the Midwest Independent System Operator (MISO) or the Southwest Power Pool (SPP).

### **Independent Power Producers of New York**

- FERC proceeding (*Re: New York Independent System Operator, Inc.*, Docket No. ER08-283-000)

Subject: Revisions to the installed capacity (ICAP) market demand curves in the New York control area, which are designed to provide economic incentives for new generation development.

### **Empresa Eléctrica de Guatemala**

- Rate proceeding before the Comisión Nacional de Energía Eléctrica

Subject: Rate of return for an electric distribution company

### **Electric Power Supply Association**

- FERC proceeding (*Re: Midwest Independent Transmission System Operator, Inc.*, Docket No. ER07-1182-000)

Subject: Critique of cost-benefit analysis by MISO Independent Market Monitor concluding that permanent establishment of Broad Constrained Area mitigation was appropriate.

**Constellation Energy Commodities Group, LLC**

- FERC proceeding regarding rate application for ancillary services by Ameren Energy (*Re: Ameren Energy Marketing Company and Ameren Energy, Inc.*, Docket Nos. ER07-169-000 and ER07-170-000)
- Subject: Analysis and testimony on appropriate “opportunity cost” rates for ancillary services, including regulation service and spinning reserve service. Case settled prior to testimony being filed.

**Suiza Dairy Corporation**

- Rate proceeding before the Office of Milk Industry Regulatory Administration of Puerto Rico.
- Subject: Analysis and testimony on the appropriate rate of return for regulated milk processors in the Commonwealth of Puerto Rico.

**IGI Resources, LLC and BP Canada Energy Marketing Corp.**

- FERC proceeding regarding the rate application by Gas Transmission Northwest Corporation (*Re: Gas Transmission Northwest*, Docket No. RP06-407-000)  
Subject: Natural gas supplies, economic lifetime, and depreciation rates.

**Baltimore Gas and Electric Co.**

- Maryland Public Service Commission (Case No. 9099)  
Subject: Standard Offer Service pricing. Testimony focused on factors driving electric price increases since 1999, and estimates of rates under continued regulation
- Maryland Public Service Commission (Case No. 9073)  
Subject: Stranded costs of generation. Testimony focused on analysis of benefits of competitive wholesale power industry.
- Maryland Public Service Commission (Case No. 9063)  
Subject: Optimal structure of Maryland’s electric industry. Testimony focused on the benefits of competitive wholesale electric markets. Presented independent estimates of the benefits of restructuring since 1999.

### **Pemex-Gas y Petroquímica Básica**

- Expert report in a rate proceeding. Presented analysis before the Comisión Reguladora de Energía on the appropriate rate of return for the natural gas pipeline industry.

### **BP Canada Marketing Corp.**

- FERC proceeding regarding the rate application by Northern Border Pipeline Company (*Re: Northern Border Pipeline*, Docket No. RP06-072-000)  
Subject: Natural gas supplies, economic lifetime, and depreciation rates.

### **Transmission Agency of Northern California**

- FERC rate proceeding (*Re: Pacific Gas & Electric Company*, Docket No. ER09-1521-000)  
Subject: Analysis of appropriate return on equity, capital structure, and overall cost of capital. Case settled prior to filing expert testimony.
- FERC rate proceeding (*Re: Pacific Gas & Electric Company*, Docket No. ER08-1318-000)  
Subject: Analysis of appropriate return on equity, capital structure, and overall cost of capital. Case settled prior to filing expert testimony.
- FERC rate proceeding (*Re: Pacific Gas & Electric Company*, Docket No. ER07-1213-000)  
Subject: Analysis of appropriate return on equity, capital structure, and overall cost of capital. Case settled prior to filing expert testimony.
- FERC rate proceeding (*Re: Pacific Gas & Electric Company*, Docket No. ER06-1325-000)  
Subject: Analysis of appropriate return on equity, capital structure, and overall cost of capital. Case settled prior to filing expert testimony.
- FERC rate proceeding (*Re: Pacific Gas & Electric Company*, Docket No. ER05-1284-000)  
Subject: Analysis of appropriate return on equity, capital structure, and overall cost of capital. Case settled prior to filing expert testimony.

- FERC rate proceeding (*Re: Pacific Gas & Electric Company*, Docket Nos. ER03-409-000, ER03-666-000)

Subject: Analysis and development of recommendation for the appropriate return on equity, capital structure, and overall cost of capital.

#### **State of New Jersey Board of Public Utilities**

- Merger application of Public Service Enterprise Group and Exelon Corporation (*I/M/O The Joint Petition Of Public Service Electric And Gas Company And Exelon Corporation For Approval Of A Change In Control Of Public Service Electric And Gas Company And Related Authorizations*, BPU Docket No. EM05020106, OAL Docket No. PUC-1874-050)

Subject: Proposed merger between Exelon Corporation and PSEG Corporation. Testimony described the structure and results of a cost-benefit analysis to determine whether the proposed merger met the state's positive benefits test, and included analysis of market power, value of changes in nuclear plant operations, and merger synergies.

#### **Sierra Pacific Power Corp.**

- FERC proceeding regarding the rate application by Paiute Pipeline Company (*Re Paiute Pipeline Company* Docket No. RP05-163-000)

Subject: Depreciation analysis, negative salvage, and natural gas supplies. Case settled prior to filing expert testimony.

#### **Matanuska Electric**

- Regulatory Commission of Alaska rate proceeding (*In the Matter of the Revision to Current Depreciation Rates Filed by Chugach Electric Association, Inc.*, Docket No. U-04-102)

Subject: Analysis of the reasonableness of Chugach electric's depreciation study.

#### **Duke Energy North America, LLC**

- FERC proceeding (*Re: Devon Power, LLC*, et al., Docket No. ER03-563-030)

Subject: Appropriate market design for locational installed generating capacity in the New England market to ensure system reliability.

### **Keyspan-Ravenswood, LLC**

- FERC proceeding, *KeySpan-Ravenswood, LLC v. New York Independent System Operator, Inc.*, Docket No. EL05-17-000

Subject: Estimation of damages arising from a failure by the NYISO to accurately calculate locational installed capacity requirements in New York City during the summer of 2002.

### **Electric Power Supply Association**

- FERC proceeding (*Re: PJM Interconnection, LLC*, Docket No. EL03-236-002)

Subject: Analysis and critique of proposed pivotal supplier tests for market power in PJM identified load pockets.

### **Vermont Department of Public Service**

- Vermont Public Service Board Rate Proceedings
  - Concurrent proceedings: *Re: Green Mountain Power Corp.*, Dockets No. 7175 and 7176. Subject: Cost of capital and allowed return on equity under cost of service regulation, as well as under a proposed alternative regulation proposal.
  - *Re: Shoreham Telephone Company*, Docket No. 6914. Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.
  - *Re: Vermont Electric Power Company*, Docket No. 6860. Subject: Development of a least-cost transmission system investment strategy to analyze the prudence of a major high-voltage transmission system upgrade proposed by the Vermont Electric Power Company.
  - *Re: Central Vermont Public Service Company*, Docket No. 6867. Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.
  - *Re: Green Mountain Power Corporation*, Docket No. 6866. Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.

### **Pipeline shippers**

- FERC proceeding regarding the rate application of Northern Natural Gas Company (*Re: Northern Natural Gas Company*, Docket No. RP03-398-000)

Subject: Gas supply analysis to determine pipeline depreciation rates as part of an overall rate proceeding.

**Arkansas Oklahoma Gas Corp.**

- Oklahoma Corporation Commission rate proceeding (*Re: Arkansas Oklahoma Gas Corporation*, Docket No. 03-088)

Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.

- Arkansas Public Service Commission rate proceedings
  - *In the Matter of the Application of Arkansas Oklahoma Gas Corporation for a General Change in Rates and Tariffs*, Docket No. 05-006-U. Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.
  - *In the Matter of the Application of Arkansas Oklahoma Gas Corporation for a General Change in Rates and Tariffs*, Docket No. 02-24-U. Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.

**Entergy Nuclear Vermont Yankee, LLC**

- Vermont Public Service Board proceeding (*Re: Petition of Entergy Nuclear Vermont Yankee for a Certificate of Public Good*, Docket No. 6812)

Subject: Analysis of the economic benefits of nuclear plant generating capacity expansion as required for an application for a Certificate of Public Good.

**Central Illinois Lighting Company**

- Illinois Commerce Commission rate proceeding (*Re: Central Illinois Lighting Company*, Docket No. 02-0837)

Subject: Analysis and development of recommendations for the appropriate return on equity, capital structure, and overall cost of capital.

**Citizens Utilities Corp.**

- Vermont Public Service Board rate proceeding (*Tariff Filing of Citizens Communications Company requesting a rate increase in the amount of 40.02% to take effect December 15, 2001*, Docket No. 6596)

Subject: Analysis of the prudence and economic used-and-usefulness of Citizens' long-term purchase of generation from Hydro Quebec, including the estimated environmental costs and benefits of the purchase.

### **Dynegy LNG Production, LP**

- FERC proceeding (*Re: Dynegy LNG Production Terminal, LP*, Docket No. CP01-423-000). September 2001

Subject: Analysis of market power impacts of proposed LNG facility development.

### **Missouri Gas Energy Corp.**

- FERC rate proceeding (*Re: Kansas Pipeline Corporation*, Docket No. RP99-485-000)

Subject: Gas supply analysis to determine pipeline depreciation rates as part of an overall rate proceeding.

### **Green Mountain Power Corp.**

- Vermont Public Service Board rate proceedings
  - *In the Matter of Green Mountain Power Corporation requesting a 12.93% Rate Increase to take effect January 22, 1999*, Docket No. 6107. Subject: Analysis of the appropriate discount rate, treatment of environmental costs, and the treatment of risk and uncertainty as part of a major power-purchase agreement with Hydro-Quebec.
  - *Investigation into the Department of Public Service's Proposed Energy Efficiency Utility*, Docket No. 5980. Subject: Analysis of distributed utility planning methodologies and environmental costs.
  - *Tariff Filing of Green Mountain Power Corporation requesting a 16.7% Rate Increase to take effect 7/31/97*, Docket No. 5983. Subject: Analysis of distributed utility planning methodologies and avoided electricity costs.
  - *Tariff Filing of Green Mountain Power Corporation requesting a 16.7% Rate Increase to take effect 7/31/97*, Docket No. 5983. Subject: Valuation of a long-term power purchase contract with Hydro-Quebec in the context of a determination of prudence and economic used-and-usefulness.

### **United Illuminating Company**

- Connecticut Dept. of Public Utility Control proceeding (*Application of the United Illuminating Company for Recovery of Stranded Costs*, Docket No. 99-03-04)

Subject: Development and application of dynamic programming models to estimate nuclear plant stranded costs.

#### **COMMERCIAL LITIGATION EXPERIENCE**

- *AEP Transmission v. Brutus Leasing, Inc., State of Ohio Court of Common Pleas, Case No. CV20140150.* Expert testimony regarding public need for property condemnation to build a high-voltage transmission line.
  - *Idaho Power Co. v. Glenss Ferry Cogeneration Partners, L.P., U.S. District Court, District of Idaho, Case No. 1:11-cv-00565-CWD.* Expert report on damages associated with breach of power sales contract.
  - *Vacqueria Tres Monjitas and Suiza Dairy, Inc. v. Jose O. Laboy, in his Official capacity, as the Secretary of the Department of Agriculture for the Commonwealth of Puerto Rico, and Juan R. Pedro-Gordian, in his official capacity, as Administrator of the Office of the Milk Industry Regulatory Administration for the Commonwealth of Puerto Rico, U.S. District Court, District of Puerto Rico, Civil Case No. 04-1840.* Expert testimony and report on country risk and failure to provide adequate compensation to fresh milk processors in Puerto Rico.
  - *Lorali, Ltd., et al. v. Sempra Energy Solutions, LLC, et al. District Court of Texas, 92<sup>nd</sup> Judicial Court, Hidalgo County, Cause No. C-356-10-A.* Expert reports regarding liquidated damages associated with breach of retail electric supply contracts.
- DPL, Inc. and its subsidiaries v. William W. Wilkins, Tax Commissioner of Ohio, Case No. 2004-A-1437.* Expert report on economic impacts of generation investment and qualification of electric utility investments as “manufacturing” investments for purposes of state investment tax credits.
- *IMO Industries v. Transamerica.* Estimated the appropriate discount rate to use for estimating damages over time associated with a failure of the insurance companies to reimburse asbestos-related damage claims and the resulting losses to the firm’s value.
  - *John C. Lincoln Hospital v. Maricopa County.* Performed statistical analysis to determine the value of a class of unpaid hospital insurance claims.
  - *Catamount/Brownell, LLC. v. Randy Rowland.* Prepared an expert report on the damages associated with breach of commercial lease.

- *Lyubner v. Sizzling Platters, Inc.*. Performed an econometric analysis of damage claims based on sales impacts associated with advertising.
- *Pietro v. Pietro*. Estimated pension benefits arising from a divorce case.
- *Nat'l. Association of Electric Manufacturers v. Sorrell*. U.S. District Court for the District of Vermont. Expert report and testimony on the costs of labeling fluorescent lamps and the impacts of labeling laws on the demand for electricity.

### **ARBITRATION CASES**

#### ***TransCanada Hydro Northeast, Inc. v. Town of Littleton, New Hampshire, (CPR File No. G-09-24).***

Subject: dispute regarding valuation for property tax purposes of a hydroelectric facility located on the Connecticut River.

Served as neutral on a three-person arbitration panel.

#### ***Belize Electricity Limited v. Belize Public Utilities Commission (Claim No. 512 of 2008).***

Subject: Proceeding before the Supreme Court of Belize alleging that the Final Decision by the Belize Public Utilities Commission setting electric rates and tariffs for the 2008-2009 period were unreasonable and non-compensatory.

Prepared independent report on behalf of the Belize Supreme Court for arbitration of the dispute.

### **SELECTED BUSINESS CONSULTING EXPERIENCE**

- For Fortis-TCI, prepared report on the economic impacts of the electric industry in the Turks and Caicos.
- For the COMPETE coalition, prepared a report on the economic impacts of state subsidized electric generating plants.
- For a confidential client, provided analysis on rate of return and capital structure, as well as key business and financial risks, for renegotiation of a long-term power-purchase agreement.
- For the Manhattan Institute, prepared a comprehensive report on the economic impacts of shutdown of the Indian Point Nuclear Facility.

- For Energy Choice Now, prepared a report on the economic benefits of retail electric competition in Michigan.
- For the COMPETE Coalition, prepared a report on how electric competition creates economic growth.
- For an industry group, developed econometric models of the impacts of shale gas production on U.S. natural gas and electric prices.
- For an environmental advocacy group, critically evaluated the financial implications of operating restrictions for an off-shore wind generating facility stemming from requirements under the U.S. Endangered Species Act.
- For a major investor-owned utility in the US, prepared a new system of short-term peak and energy forecasting models.
- For a major wholesale electric generation company, prepared comprehensive economic impact studies for use in FERC hydroelectric relicensing proceedings.
- For a major investor-owned utility in the Southwest US, prepared a detailed econometric model and wrote a comprehensive report on residential price elasticity that was required by regulators.
- For a major investor-owned utility in the Southwest US, developed a methodology to value nuclear plant leases that incorporated future uncertainty regarding greenhouse gas regulations.
- Faculty member, PURC/World Bank International Training Program on Utility Regulation and Strategy, University of Florida, Public Utility Research Center, Gainesville, FL, 2008 – 2009. Courses taught:
  - Sector Issues: Basic Techniques–Energy
  - Sector Issues in Rate Design: Energy
  - Sector Issues in Rate Design: Energy–Case Studies
  - Transmission Pricing Issues
- For a major solar energy firm, evaluated costs and benefits of alternative solar technologies; assisted with siting and transmission access issues.
- For the South African Department of Minerals and Energy, recommended pricing methods and regulatory accounts to ensure that petroleum product prices appropriately reflected costs and to enhance the incentives for industry investment “Final Report for Task 141. “
- For industrial customers in the State of Vermont, prepared a position paper on the impacts of demand side management funding on electric rates and competitiveness.

- For a major New York brokerage firm, performed a fairness opinion valuation of a gas-fired electric generating facility.
- For electric utilities undergoing restructuring, developed comprehensive economic models to value buyer offers associated with nuclear power plant divestitures.
- For a large municipal electric utility in Florida, analyzed real option values of alternative proposed purchased generation contracts whose strike prices were tied to future natural gas and oil prices, and developed contract recommendations.
- For a municipal electric utility in Florida, developed an analytical model to determine risk-return tradeoffs of alternative generation portfolios, identify an efficient frontier of generation asset portfolios, and recommended asset purchase and sale strategies.
- For Central Vermont Public Service Corp. and Green Mountain Power Corp., developed analyses of distribution capacity investments accounting for uncertainty over future peak load growth.
- For a major electric utility in Latin America, developed risk management strategies for hedging natural gas supplies with minimal up-front investment; prepared training materials for utility staff; and wrote the utility's risk management Policies and Procedures Manual.
- For a major nuclear plant owner and operator in the U.S., prepared reports of the economic benefits of nuclear plant operation and development.
- For the Electric Power Supply Association, prepared numerous policy papers addressing wholesale electric market design and competition.
- For the California Energy Commission, developed a new policy approach to renewables feed-in tariffs and developed portfolio analysis models to develop an "efficient frontier" of generation portfolios for the state.
- For a major nuclear plant owner and operator, assessed the likelihood of relicensing a specific nuclear plant in New England, given state regulatory concerns over on-site spent fuel storage.
- For a large investor-owned utility in the Southeast, analyzed alternative environmental compliance strategies that directly incorporated uncertainty over future emissions costs, environmental regulations, and alternative pollution control technology effectiveness.
- For a Special Legislative Committee of the Province of New Brunswick, served as an expert advisor on the development of a deregulated electric power market.

- For the Bonneville Power Administration, developed models to assess the economic impacts of local generation resource development in Washington State and Oregon.
- For an electric utility in the Pacific Northwest, assisted in negotiations surrounding relicensing of a large hydroelectric generating facility.
- Served as an expert advisor for the Northwest Power Planning Council regarding future power supplies, load growth, and economic growth.

### **PROFESSIONAL ACTIVITIES**

- Reviewer, *Energy*
- Reviewer, *The Energy Journal*
- Reviewer, *Energy Policy*
- Reviewer, *Journal of Regulatory Economics*
- Editorial Board Member, *Natural Gas & Electricity*

### **PROFESSIONAL ASSOCIATIONS**

- Energy Bar Association
- Society for Benefit-Cost Analysis

### **PUBLICATIONS**

#### **Peer-reviewed journal articles**

- Lesser, J., "The High Cost of Low-Value Wind Power," *Regulation*, Spring 2013, pp. 22-27.
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- Lesser, J. and C. Strother, "Natural Gas Storage," in *Energy Law and Transactions*, Lexis/Nexis, 2012-14 eds.
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- Lesser, J., D. Dodds, and R. Zerbe. *Environmental Economics and Policy*, Reading: MA: Addison Wesley Longman, 1997.

### **Trade press publications**

- Lesser, J., and C. Feinstein, "Opening the Black Box: A New Approach to Utility Asset Management," *Public Utilities Fortnightly*, January 2014, pp. 36-42.
- Lesser, J., "The Devil and the EPA," *Natural Gas and Electricity* (December 2013): 30-32.
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- “Public Policy and Energy Markets: Good Intentions Gone Astray,” presentation to the Independent Power Producers of New York, Fall Conference, September 13, 2012.
- “EPA Regulation of Generator Emissions – Key Market Issues,” Energy Bar Association, Annual Meeting, April 28, 2012.
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- “Financing the Smart Grid,” Energy Bar Association Seminar, Washington, DC, December 4, 2009.
- “Renewable Power: At the Crossroads of Economics and Policy,” Presentation to the Utilities State Government Organization, Newport, Rhode Island, July 13, 2009.
- “The Stimulus Act and Laws they Didn’t Teach You in Law School,” presentation to the 27<sup>th</sup> National Regulatory Conference, Williamsburg, VA, May 19, 2009.
- “Rate Recovery for Capital Intensive Generation: Rate Base and Construction Work in Progress,” Law Seminars International, Las Vegas, NV, February 5, 2009.
- “Financial Risks Faced by Regulated Utilities: Implications for the Cost of Capital and Ratemaking Policies,” Law Seminars International, Las Vegas, NV, February 7, 2008.
- “Alternative Regulatory Structures and Tariff Mechanisms: Practical approaches to providing low-cost, environmentally responsible energy and how to avoid some dangerous pitfalls.” Western Energy Institute, October 1, 2007.
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- “Electricity and Natural Gas Regulation: An Introduction.” Law Seminars International, Washington, DC, March 17–18, 2005.

**POWER PURCHASE AND SALE AGREEMENT**

**by and between**

**[GENCO]**

**and**

**OHIO POWER COMPANY**

**dated as of**

\_\_\_\_\_, 2014

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## POWER PURCHASE AND SALE AGREEMENT

**THIS POWER PURCHASE AND SALE AGREEMENT** (this “**Agreement**”), dated as of \_\_\_\_\_, 2014, is by and between [GenCo], a Delaware corporation (“**Seller**”), and OHIO POWER COMPANY, an Ohio corporation (“**Buyer**”). Buyer and Seller are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties.**”

### RECITALS

A. Seller, an indirect subsidiary of American Electric Power Company, Inc., with its principal place of business in the State of Ohio, owns or will have an ownership interest in the Ohio based generation facilities shown in Schedule A entitled Ohio Generation Facilities.

B. The Parties desire to enter into a transaction in which Seller sells and Buyer purchases the Capacity, and associated Unit Contingent Energy and Ancillary Services, as delivered or made available from Seller’s ownership interest in the generation facilities in Schedule A for a term through the remaining commercial operational life of each of the Schedule A Generation Facilities.

C. The Parties desire to set forth certain terms and conditions applicable to such transaction.

In consideration of mutual covenants and agreements contained herein, the Parties agree as follows:

### ARTICLE I

#### DEFINITIONS

1.1 Defined Terms. Unless otherwise defined herein, the following terms, when used herein, shall have the meaning set forth below:

“**Affected Party**” has the meaning set forth in Section 3.7.

“**Affiliate**” means, with respect to any Person, any other Person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such Person. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

“**Agreement**” means this Power Purchase and Sale Agreement entered into pursuant to Seller’s market based rate authority.

“**Allowance Transfer Deadline**” means the date by which Allowances must be submitted for recordation with the EPA or other relevant Governmental Authority in order to meet the applicable Allowance obligation for the control period immediately preceding that deadline.

“**Allowances**” means emission allowances, emission credits, and any similar rights related to emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO<sub>2</sub>, mercury, particulates or any other substance under any relevant federal, state or local law or recognized by any Governmental Authority or other entity, and all other environmental attributes.

“**Ancillary Services**” means regulation and frequency response services; energy imbalance services; automatic generating control services; spinning, non-spinning, supplemental and replacement reserve services, reactive power and voltage support services, black start services and all other services or products ancillary to the operation of the Facility that are defined as ancillary services in the Transmission Operator’s relevant transmission tariff or are commonly sold or saleable, to the extent that the assets comprising the Facilities provide those services or products.

“**Approvals**” means all approvals, permits, licenses, consents, waivers or other authorizations from, notifications to, or filings or registrations with, third parties, including without limitation, Governmental Approvals.

“**Business Day**” means any day except a Saturday, Sunday, or a United States Federal Reserve Bank holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time at the relevant Party’s principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

“**Buyer**” has the meaning set forth in the preamble hereto.

“**Buyer’s Contractual Capacity**” means Seller’s Capacity of the Facilities identified in Schedule A subject to the applicable Facility Operating Agreement, which entitlement is approximately 2,671 MW as of the date set forth in the preamble to this Agreement.

“**Capacity**” means the output level, expressed in MW, that a Facility, or the components of equipment thereof, is capable, as of a given moment, of continuously producing and making available at the Delivery Point, taking into account the operating condition of the equipment at that time, the auxiliary loads, the Facility Operating Agreement and other relevant factors.

“**Capital Improvements Work**” shall mean (i) for wholly owned Seller Facilities, the modeling, studying, engineering, design, procurement, purchasing, construction, inspection, start-up and testing of (a) minor or non-material capital improvements, replacements, repairs or additions to the Facility (b) mutually agreed to costs by both Buyer and Seller for any major or material capital improvements, replacements, repairs or additions to the Facility or (ii) for Seller Facilities that are jointly owned, capital improvements, replacements, repairs or additions to the Facility.

“**Capacity Payment**” has the meaning set forth in Section 5.5.

“**Cardinal Station Agreement**” means the agreement, dated as of January 1, 1968, by and between the Seller, Buckeye Power, Inc. and Cardinal Operating Company, including all amendments and any future amendments thereto.

“**Change-in-Law**” means, after the date set forth in the preamble to this Agreement, the adoption, imposition, promulgation, change in interpretation or modification by a Governmental Authority of any law, regulation or Governmental Approval, or the issuance of a final and non-appealable order, judgment, award or decree of a Governmental Authority having the effect of the foregoing.

“**Change-in-Law Taxes**” means, after the date set forth in the preamble to this Agreement, any change (increase or decrease) in Taxes imposed on Seller on (a) the sale or use of fuel for generation of electricity, (b) the sale of Capacity or (c) the production or sale of Energy or Ancillary Services, in any case, resulting from a Change-in-Law.

“**Claims**” means all claims or actions, threatened or filed and, whether groundless, false, fraudulent or otherwise, that directly or indirectly relate to the subject matter of an indemnity, and the resulting losses, damages, expenses (including reasonable attorneys’ fees and disbursements) and court costs, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the termination of this Agreement.

“**Closing**” and “**Closing Date**” means the date upon which the Parties obtain all regulatory approvals for this Agreement.

“**Contract Price**” means the price to be paid by Buyer to Seller for the purchase of the Buyer’s Contractual Capacity and associated Energy and Ancillary Services, as determined in accordance with the provisions of Article V.

“**Contract Year**” means the period beginning at 12:01 a.m. EPT on the Start Date and ending on December 31<sup>st</sup> of the same year, and each succeeding calendar year thereafter during the Delivery Period. If the first or last Contract Year consists of a shorter period than a full calendar year, including by reason of the termination of this Agreement prior to the expiration of the Delivery Period, then that Contract Year may consist of a shorter period than a full calendar year, in which case with respect to that Contract Year, all terms and provisions of this Agreement that refer to or are based on a Contract Year shall be adjusted ratably downward to reflect such shorter period.

“**Delivery Period**” has the meaning set forth in Section 2.2.

“**Delivery Point**” has the meaning set forth in Section 3.4.

“**Depreciation Payment**” has the meaning set forth in Section 5.4.

“**Effective Date**” means the date on which all of the conditions precedent set forth in Section 11.1 have been satisfied or waived, which date shall not be earlier than the Closing Date.

“**End Date**” has the meaning set forth in Section 2.2.

“**Energy**” means three-phase, 60-cycle alternating current electric energy, expressed in MWh.

“**EPA**” means the United States Environmental Protection Agency or any successor agency with similar jurisdiction.

“**EPT**” or “**Eastern Prevailing Time**” means the local time at the geographical location of the Delivery Point.

“**Equitable Defenses**” means any bankruptcy, insolvency, reorganization and other laws affecting creditors’ rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

“**Facility**” means any unit identified on Schedule A entitled Ohio Generation Facilities.

“**Facility Operating Agreement**” means the applicable operating agreement(s) by and among Seller and the other co-owners thereto, as amended or supplemented from time to time, and shall include all exhibits, schedules and annexes thereto, and, for purposes of Section 10.5, such term shall be deemed to include all other agreements, documents, certificates and instruments to which Seller is a party with respect to or in connection with a Facility, as the same may be supplemented or amended from time to time. Upon execution and delivery of this Agreement, Seller will, to the extent not already in the possession of Buyer, deliver to Buyer a true and correct copy of the operating agreement(s) as of that date, including any amendments thereto.

“**Facilities**” means the generation facilities or units on Schedule A entitled Ohio Generation Facilities.

“**Facility LMP Point**” means the location at each Facility recognized by the PJM’s scheduling and settlement systems.

“**FERC**” means the Federal Energy Regulatory Commission or any successor entity with similar jurisdiction.

“**Force Majeure**” means an event or circumstance which prevents one Party from performing its obligations under this Agreement, which event or circumstance was not reasonably anticipated as of the date set forth in the preamble to this Agreement, which is not within the reasonable control of, or the result of the negligence of, the Affected Party, and which, by the exercise of due diligence, the Affected Party is, by using reasonable efforts, unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (a) Seller’s ability to sell Seller’s Capacity Entitlement or associated Energy or Ancillary Services at a price greater than the Contract Price; (b) the loss of Buyer’s markets; or (c) a Party’s inability economically to purchase, use, sell or resell fuel, equipment or services or the Capacity, Energy or Ancillary Services purchased hereunder. Force Majeure includes events of “Force Majeure” as defined in a Facility Operating Agreement, to the extent excusing the performance of the Facility operator or the other joint owners thereto from their obligations under that agreement, but only to the extent affecting the Parties’ performance under this Agreement.

“**Fuel Costs**” means without limitation, all fixed or variable costs, expenses, losses, gains, liabilities, fuel hedging, claims and charges related to the acquisition, sale, storage, inventory, transloading, handling, balancing and transportation and delivery of fuel and all

expenses recorded to FERC accounts 501 and 502 including, without limitation, coal, natural gas, diesel fuel, oil, consumables, chemicals, trona, urea, limestone, lime hydrated lime, ammonium carbonate, activated carbon, ash, scrubber waste, plant waste and gypsum disposal expense and sales credits, emission Allowance expenses (including all Allowance expenses recorded in Account 509, along with gains/losses in Accounts 411.8 and 411.9), for the Schedule A Generation Facilities, including related costs of credit,

“**Fuel Payment**” has the meaning set forth in Section 5.2.

“**Governmental Approval**” means any permit, authorization, registration, consent, action, waiver, exception, variance, order, judgment, decree, license, exemption, publication, filing, notice to, or declaration of or with, or required by any Governmental Authority or applicable law.

“**Governmental Authority**” means any federal, state, tribal, local, or municipal government body; and any governmental, regulatory, or administrative agency, commission, body, agency, instrumentality, or other authority exercising or entitled to exercise any executive, judicial, legislative, administrative, regulatory, or taxing authority or power, including any court or other tribunal.

“**Imbalance Charges**” means any penalties, fees or charges assessed by a Transmission Operator or Transmission Provider for failure to satisfy requirements for balancing of electric energy receipts and deliveries or loads and generation, or payable to any other Person in connection with the delivery of electrical energy in an amount(s) different from the amount(s) scheduled.

“**Income Tax**” means any Tax imposed by any Taxing Authority (i) based upon, measured by or calculated with respect to gross or net income, profits, commercial activity, or receipts (including municipal gross receipt Taxes, capital gains Taxes and minimum Taxes) or (ii) based upon, measured by or calculated with respect to multiple bases (including corporate franchise Taxes) if one or more of such bases is described in clause (i), in each case together with any interest, penalties or additions attributable to such Tax.

“**Indemnified Parties**” has the meaning set forth in Section 13.2.

“**Letter(s) of Credit**” means one or more irrevocable, unconditional, transferable standby letters of credit issued by a major U.S. commercial bank or the U.S. branch office of a foreign bank with, in either case, a Credit Rating of at least (a) “A-” by S&P and “A3” by Moody’s, if such entity is rated by both S&P and Moody’s or (b) “A-” by S&P or “A3” by Moody’s, if such entity is rated by either S&P or Moody’s but not both, in a form acceptable to the Party in whose favor the Letter of Credit is issued. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

“**Mobile-Sierra Doctrine**” has the meaning set forth in Section 13.13.

“**Monthly Payment**” has the meaning set forth in Section 5.1.

“**Moody’s**” means Moody's Investors Services, Inc. or its successor.

“**MW**” means megawatt.

“**MWh**” means megawatt-hour.

“**NERC**” means the North American Electric Reliability Corporation or any successor entity with similar jurisdiction.

“**O&M Payment**” has the meaning set forth in Section 5.3.

“**Operation and Maintenance Costs**” means all fixed or variable costs, expenses, losses, liabilities, claims, charges and associated credits incurred directly or indirectly in the performance of Operating Work, including a ratable portion of retirement costs, but not including Fuel Costs.

“**Operating Work**” means the operation, maintenance, use, repair or retirement of a Facility on or after the Start Date, including but not limited to labor; parts; supplies; insurance; permits; related taxes; community relations; procurement of ancillary services, fuel and other consumables; fuel acquisition or sales, transportation balancing and storage; waste handling and disposal; filing, defense and settlement of claims, suits and causes of action; procurement (or sale) of Allowances and settlement of all other environmental charges (or credits) pertaining to the operation of a Facility; but excluding any Capital Improvements Work.

“**Outage**” shall mean any unavailability, in whole or in part, of the Facility whereby it is not capable of fully operating at its rated capability due to (i) a forced derating, Forced outage maintenance derating, maintenance outage, planned derating, planned outage, (all as defined in the NERC Generating Unit Availability Data System (“**GADS**”) Data Reporting Instructions); (ii) the actual or anticipated failure of component(s); (iii) external restrictions; (iv) testing; (v) work being performed; (vi) maintenance; (vii) construction, or (viii) any other condition or circumstance that reduces electrical generating output from time to time from the Facility so as to prevent Seller from performing its obligations in whole or in part.

“**Party**” has the meaning set forth on the preamble hereto.

“**Performance Assurance**” means collateral in the form of Cash, Letter(s) of Credit, or other security or assurances acceptable to the Requesting Party.

“**Person**” means any individual, corporation, partnership, limited liability company, other business organization of any kind, association, trust, or governmental entity, agency or instrumentality.

“**PJM**” means the PJM Interconnection, LLC or any successor entity with similar responsibilities.

“**Property Tax**” means any Tax resulting from and relating to the assessment of real or personal property by any Taxing Authority.

“**Seller**” has the meaning set forth in the preamble hereto.

“**Seller’s Debt Percentage**” or “**DP**” means for purposes of this Agreement the percentage of 50%.

“**Seller’s Equity Percentage**” or “**EP**” means for purposes of this Agreement the percentage of 50%.

“**Seller’s Facilities Net Book Value**” or “**FNBV**” means the net book value of the Facilities as reflected on the books and records of Seller immediately prior to the Contract Year, and including all electric plant in service and capital lease assets net of accumulated depreciation and other investment (e.g. fuel and materials and supplies inventories, prepayments, plant held for future use, working capital, construction work in progress (“CWIP”), asset retirement obligations including ash pond closure costs, other deferred credits and accumulated deferred taxes).

“**Seller’s Long Term Debt Rate**” or “**LTDR**” means from June 1, 2015 through December 31, 2016 an initial rate of 4.73%. Thereafter, starting on January 1, 2017, it will be Seller’s average annual cost of long-term debt (i.e., debt having maturities of greater than twelve calendar months) as reflected on Seller’s books and records as of the relevant determination date, updated as of January 1<sup>st</sup> of each calendar year thereafter, or updated at more frequent intervals as reasonably determined by Seller.

“**Seller’s Return on Equity**” or “**ROE**” means Seller’s post-tax rate of return on equity, which amount will equal, for each Contract Year, the average of the daily Moody’s Long-Term Baa Corporate Bond Index for the month of December of the preceding calendar year, plus 650 basis points; provided, however, such amount not to be less than 8.90% or greater than 15.90%.

“**Seller’s Weighted Average Cost of Capital**” or “**WACOC**” has the meaning set forth in Section 5.5.

“**Start Date**” has the meaning set forth in Section 2.2.

“**Straddle Period**” means, as appropriate, either any Tax Period beginning before the beginning of the first Contract Year and ending either during or as of the end of the first Contract Year or any Tax Period that is longer than one month. For example, pursuant to Section 8.5, the Tax Period for Property Taxes is each calendar year. Hence, the Tax Period for Property Taxes is a Straddle Period.

“**Tax**” or “**Taxes**” means any federal, state, local, or foreign income, commercial activity, gross receipts, value added, windfall or other profits, alternative or add-on minimum, estimated, franchise, profits, sales, use, real property, personal property, ad valorem, vehicle, airplane, boat, license, payroll, employment, workers’ compensation, unemployment compensation, withholding, social security, disability, excise, severance, stamp, occupation, premium, environmental (including taxes under Code section 59A or any cost, charge or other financial burden on emissions), carbon dioxide, other greenhouse gases, charges on consumption, transportation or use of energy from such sources, customs duties, import fees, capital stock transfer, title, documentary, or registration, or other tax, duty, or impost of any kind whatsoever, whether disputed or not, and on either side of the Delivery Point. “Taxes” includes (i) any liability for the payment of any amounts described in the preceding sentence as a result of

being a member of an affiliated, consolidated, combined, or unitary group for any taxable period, (ii) any liability for the payment of any amount described in clause (i) above as a result of being a Person required to withhold or collect Taxes imposed on another Person, (iii) any liability for the payment of any amount described in the preceding sentence or in clause (i) or (ii) of this sentence as a result of being a transferee of, or successor in interest to, any Person or as a result of an express or implied obligation to indemnify any Person, and (iv) any and all interest, penalties, additions to tax, or additional amounts imposed in connection with or with respect to any amount described above in this definition.

“**Taxing Authority**” shall mean, with respect to any Tax, the governmental entity (national, local, municipal or otherwise) or political subdivision thereof that imposes such Tax, the agency (if any) charged with the collection of such Taxes for such entity or subdivision, including any governmental or quasi-governmental entity, a council (if any) or agency that imposes, grants or monitors Taxes or the abatements thereof, or is charged with collecting social security or similar charges or premiums.

“**Tax Period**” means the time period for which or during which a Tax is imposed by any Taxing Authority.

“**Tax Reimbursement Payment**” has the meaning set forth in Section 5.6.

“**Term**” has the meaning set forth in Section 2.1.

“**Transmission Operator**” means PJM or any Transmission Provider, independent system operator, regional transmission operator or other transmission operator from time to time having authority to control the transmission control area to which the Facility is interconnected.

“**Transmission Provider**” means any Person or Persons that owns, operates or controls facilities used for the transmission of electrical energy in interstate commerce.

“**Unit Contingent**” or reference to “**Unit Contingency**” means, with respect to Energy or Ancillary Services associated with Buyer’s Contractual Capacity, that such Energy or Ancillary Services are intended to be supplied from the Facility and Seller’s failure to deliver such Energy or Ancillary Services is excused to the extent the Facility (including all facilities on Seller’s side of the Delivery Point) is unavailable as a result of (i) an Outage, (ii) Force Majeure or (iii) Buyer’s failure to perform.

1.2 Interpretation. Unless the context otherwise requires:

- (a) Words singular and plural in number will be deemed to include the other and pronouns having masculine or feminine gender will be deemed to include the other.
- (b) Any reference herein to any Person includes its successors and permitted assigns and, in the case of any Government Authority or Taxing Authority, any Person succeeding to its functions and capacities.
- (c) Any reference herein to any Article, Section, clause, or schedule means and refers to the appropriate Article, Section or clause or schedule in this Agreement.

- (d) Other grammatical forms of defined words or phrases have corresponding meanings.
- (e) The term “including” when used in this Agreement means “including without limitation.”
- (f) Unless otherwise specified, a reference to a specific time for the performance of an obligation is a reference to that time in the place where that obligation is to be performed.
- (g) A reference to a document or agreement, including this Agreement, includes all appendices and schedules thereto.
- (h) A reference to a document or agreement, including this Agreement, includes a reference to that document or agreement as amended, supplemented, amended and restated or otherwise modified from time to time.
- (i) If any payment, act, matter or thing hereunder would occur on a day that is not a Business Day, then such payment, act, matter or thing shall, unless otherwise expressly provided for herein, occur on the next succeeding Business Day.
- (j) The words “hereof,” “hereunder,” “herein,” “herewith,” and “hereto,” and similar words refer to this Agreement as a whole and not to any particular Article, Section or clause in this Agreement.

1.3 Technical Meanings. Words not otherwise defined herein that have well-known and generally accepted technical or trade meanings are used herein in accordance with such recognized meanings, as of the date set forth in the preamble to this Agreement.

## ARTICLE II

### TERM

2.1 Term. The term of this Agreement (“**Term**”) shall commence on the date set forth in the preamble to this Agreement and shall continue, unless earlier terminated in accordance with the provisions of this Agreement, until the End Date.

2.2 Delivery Period. Subject to Section 2.3 or Section 2.4, the period during which the Parties will be obligated to purchase and sell Capacity, Energy and Ancillary Services as set forth in this Agreement (“**Delivery Period**”) will commence on June 1, 2015, or such other earlier date as may be jointly specified by the Parties (“**Start Date**”), and run through the conclusion of the commercial operational life of the generation facilities listed on Schedule A, including any post-retirement period to complete all asset retirement obligations and any other removal projects (“**End Date**”), unless the Parties otherwise mutually agree in writing upon an alternative End Date.

2.3 Early Termination Right. Subject to Buyer complying with its obligations under Article V and provided Buyer is not a Defaulting Party, Buyer will have on or after the first

anniversary of the Start Date, the right, but not the obligation, upon no less than three hundred and sixty five (365) days notice to Seller to terminate, in whole, this Agreement prior to the End Date if retail cost recovery for Buyer's costs hereunder is discontinued or substantially diminished, including through a one-time significant disallowance for retail rate recovery of costs.

2.4 Other Early Termination Rights. In the event the Parties are unable to reach agreement upon the retirement date of a Unit or Facility, the Parties may mutually agree to remove such Unit or Facility from this Agreement, subject to Buyer complying with its obligations under Article V.

### ARTICLE III

#### PURCHASE AND SALE OBLIGATION

3.1 Seller's and Buyer's Obligations. Subject to, and in accordance with, the terms and conditions of this Agreement, Seller agrees to sell and deliver, and Buyer agrees to purchase, receive, and pay for, Buyer's Contractual Capacity and the Energy and Ancillary Services associated with Buyer's Contractual Capacity delivered by Seller to the Delivery Point during each hour of the Delivery Period.

3.2 Unit Contingent. All Energy and Ancillary Services associated with Buyer's Contractual Capacity and all of Seller's obligations to sell and deliver the Energy and Ancillary Services associated with the Buyer's Contractual Capacity are Unit Contingent.

3.3 Fuel. During the Delivery Period, Seller will arrange, provide, procure, supply, manage, transact, transport and deliver Fuel to Facilities where Seller performs this function, and at all remaining Facilities, Seller will provide input to the plant operator on Fuel purchases and Fuel related matters for such Facility. Buyer will have the rights to monitor the Fuel procurement and logistics process and provide reasonable direction on the activity to the Seller at Operating Committee Meetings. When Seller needs to acquire Fuel on behalf of Buyer, Seller agrees to conduct such purchases of Fuel, whenever reasonably possible, using competitive methods, including, without limitation, requests for proposals, and Buyer will have the right, but not the obligation, to observe, monitor, and approve the results of such competitive methods. Excluding emergency situations, Fuel procurements not purchased through competitive methods must first be approved by Buyer. Any fuel purchase contracts used to supply fuel to the Facilities that are in effect prior to and extend beyond the Start Date will continue to be utilized for the Facilities. Buyer acknowledges and agrees that existing contracts entered into prior to the Start Date will continue to be utilized to supply fuel to Seller's generation covered by this Agreement and if any such fuel is also utilized to supply fuel to Seller's generation that is not part of this Agreement the allocation of such fuel between the Facilities and the Seller's other units will be performed in an equitable manner approved by both the Seller and the Buyer. Any such pre-existing contracts will not be renewed or extended to serve the Facilities covered by this Agreement unless approved by the Buyer.

3.4 Delivery Point. The Delivery Point for Energy and Ancillary Services associated with Buyer's Contractual Capacity will be the location of the PJM node at each facility, typically

located at the high side of the transformers located at each of the generating facilities identified in Schedule A, at which point the quantities of such Energy or Ancillary Services delivered by Seller to Buyer will be recorded and measured by the relevant revenue meters.

3.5 Scheduling and Dispatch. Buyer or its agent will dispatch the generation associated with the Facilities by reviewing and determining the parameters associated with PJM generation offers, including how such generation will be offered to PJM, for the Energy and Ancillary Services associated with Buyer's Contractual Capacity and Seller will, subject to the requirements of PJM and the operating parameters of the Facilities, as determined by the Facility operator, operate and control the Facilities and schedule with PJM pursuant to Buyer's dispatch criteria and PJM's requirements and instructions. Buyer acknowledges and agrees that it will be obligated at all times to receive Seller's allocation of minimum output of a Facility, consistent with unit operation limitations and any Facility Operating Agreement. Schedules will be adjusted to the extent necessary to allow Seller or the Facility operator to start-up, operate, curtail or shut-down any of the Facilities as required to comply with instructions from the Transmission Operator. Seller will cooperate and provide any assistance to Buyer so that Buyer can determine how such generation will be offered to PJM. Buyer will be allocated any excess (or deficit) amount of Energy or Ancillary Services made available by Seller at the Delivery Point over (or under) the amount of Energy or Ancillary Services Scheduled by the Buyer. Buyer will be responsible for all Imbalance Charges associated with the Energy made available to it by Seller at the Delivery Point, provided, however, that any such Imbalance Charges resulting from Seller's unexcused failure to dispatch, or to cause the Facility operator to dispatch, the Energy associated with the Seller's Capacity Entitlement that are designated by Buyer will be the responsibility of the Seller. The Energy and Ancillary Services associated with Buyer's Contractual Capacity will be recorded by the Parties in PJM's scheduling and settlement systems at the Facility LMP Point.

3.6 Transmission And Related Costs. Seller shall make all Energy and Ancillary Services associated with Seller's Capacity Entitlement available to Buyer at the Delivery Point. Buyer shall be responsible for transmission service at and from the Delivery Point and shall coordinate, as necessary, for scheduling services with the Transmission Operator to receive all Energy and Ancillary Services associated with the Seller's Capacity Entitlement at the Delivery Point. Buyer shall have the right to designate an agent for coordinating, as needed, with PJM related to the Capacity, Energy and Ancillary Services received under this Agreement. Buyer shall be responsible (i) for all costs or charges imposed on or associated with the Seller's Capacity Entitlement and associated Energy and Ancillary Services and the delivery of all Energy and Ancillary Services associated with the Seller's Capacity Entitlement at and after the Delivery Point, and (ii) for any and all Imbalance Charges consistent with Section 3.5. Subject to reimbursement as set forth in Article IV, Seller shall be responsible for all costs or charges imposed on or associated with the Seller's Capacity Entitlement and associated Energy and Ancillary Services and the delivery of all Energy and Ancillary Services associated with the Seller's Capacity Entitlement up to the Delivery Point.

3.7 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement (other than an obligation to pay money), and such Party (the "**Affected Party**") gives notice and details of the Force Majeure

to the other Party as soon as practicable (but not later than thirty (30) days thereafter to the extent such details are then available) then the Affected Party shall be excused from the performance of its obligations under this Agreement (other than the obligation to make payments) so long as the Affected Party shall be using all reasonable efforts to overcome the Force Majeure and resume performance as soon as possible. The non-Affected Party shall not be required to perform or resume performance of its obligations (excluding payment obligations) to the Affected Party corresponding to the obligations of the Affected Party excused by Force Majeure, until such time and to the extent the Affected Party resumes its performance.

3.8 Allowances. Seller shall separate the Allowance inventories associated with the Facilities and maintain them in a separate subaccount for Buyer's benefit. To the extent Seller has any Allowances prior to the Start Date that are not associated with the Facilities or any of the Seller's other generation units, such Allowances will be allocated to Buyer's separate subaccount and the Seller's other Allowance subaccounts based on the emissions of the applicable units over the 5 prior calendar years. The applicable units will be all the units required to provide Allowances for its emissions, excluding any units retired prior to the Start Date. Following the Start Date, the subaccount established for Buyer shall be used to record all Allowances arising from or associated with a Facility that Seller is granted or to which it is entitled for the Delivery Period, within thirty (30) days of such grant or other effective date, whether such grant or entitlement is made on a one-time, annual or other periodic basis. Allowances will be removed from the subaccount established for Buyer as needed to comply with surrender requirements associated with any applicable emissions from the Facilities by the Allowance Transfer Deadline, and the associated Allowance expense will be borne by the Buyer. Buyer shall manage all Allowances in the subaccount established for Buyer, including the purchasing, selling or other disposition of the Allowances and will receive any gains or any losses associated with such management.

3.9 Failure to Deliver Energy/Ancillary Services. If Seller fails to or Seller fails to cause the Facility operator under the Facility Operating Agreement to Schedule, Dispatch and/or deliver all or any part of the Energy and/or Ancillary Services that are Scheduled and Dispatched by Buyer pursuant to this Agreement and it is not the result of an Outage or a Force Majeure, Seller shall pay Buyer an amount equal to the sum of (a) the positive difference, if any between the Contract Price of the Energy and/or Ancillary Services to be supplied by Seller and (b) the price for a corresponding amount of replacement Energy and/or Ancillary Services.

3.10 Consent Decree. Due to certain of the Facilities being subject to the Consent Decree between U.S. EPA and Ohio Power Company entered on December 10, 2007 and as issued in Civil Action No. C2-99-1182 and consolidated cases by the United States District Court for the Southern District of Ohio, Eastern Division, as modified from time to time ("Consent Decree"), Seller will constrain the dispatch of impacted Facilities if or when needed to ensure compliance with any emission limitations required by the Consent Decree. Such limitations will be reasonably economically imposed and applied on a consistent basis between the Agreement Facilities and other generating units of the Seller that are not part of this Agreement. Buyer shall bear the full cost of any fines or penalties resulting from non-compliance with any resulting emission limitations of the Agreement Facilities associated with Buyer's rights to dispatch the Facilities hereunder. Seller shall bear the full cost of any fines or

penalties resulting from Seller's failure to constrain the use of impacted Facilities needed to ensure compliance with any emission limitations required by the Consent Decree.

3.11 Cardinal Station Agreement. Buyer acknowledges and agrees that Buyer's entitlements and obligations under this Agreement shall be subject to, conditioned upon, and net of all the entitlements and obligations of Buckeye under the Cardinal Station Agreement related to capacity, energy and ancillary service entitlements and back-up obligations. Accordingly, Buyer shall provide for Buckeye's use and bear all of the net cost of providing all such entitlements directly to Buckeye or to Seller for Buckeye's benefit. Consistent with Section 3.5, the Buckeye's Units shall be dispatched and the Buyer shall receive the corresponding capacity, energy and ancillary service revenues, net of any applicable costs, as described under and subject to the Cardinal Station Agreement. During the Delivery Period, Seller shall not agree to any amendment, waiver or other modification of the Cardinal Station Agreement without obtaining the prior written consent of Buyer. During the 2015/2016 Planning Year, Seller will credit to Buyer Capacity revenues associated with Buckeye's Units in an amount equal to the Capacity revenues of the Facilities that have been provided to Buckeye for that Planning Year.

## ARTICLE IV

### FACILITY OPERATIONS

4.1 Operation and Maintenance. At all times during the Delivery Period, Seller shall perform the Operating Work, or cause the Operating Work to be performed, in accordance with good commercial and prudent utility practice consistent with the procedures employed by Seller at similar generating stations or the procedures followed by the operator of units that are not wholly owned by Seller. Subject to reimbursement as set forth in Article V, Seller shall be responsible for all costs, expenses, losses, liabilities and charges incurred by it, or on its behalf, in the performance of Operating Work, including the procurement of Ancillary Services sufficient to satisfy Ancillary Service obligations to the Transmission Operator related to the Facility.

4.2 Capital Improvements. From time to time during the Term, Seller shall perform, or cause to be performed, Capital Improvements Work related to a Facility. For major or material projects at a wholly owned Seller Facility, Buyer's prior written approval and agreement must first be obtained before proceeding with such Capital Improvements Work. For a unit at a Facility that is jointly owned, Seller will obtain and communicate to the third party operator Buyer's input on any Capital Improvements Work proposed. Subject to reimbursement as set forth in Article V, Seller shall be responsible for all costs, expenses, losses, liabilities and charges incurred by it, or on its behalf, in the performance of Capital Improvements Work. Annually, Seller will provide Buyer with a confidential three year forecast of projected Capital Improvements Work.

4.3 Planned Outage Schedule. Seller will develop and implement, or cause to be developed and implemented, a planned outage and maintenance schedule for Facilities that Seller operates that is coordinated with American Electric Power Service Corporation. For Facilities that are not operated by Seller, Seller will communicate Buyer's input on planned outages and maintenance schedules for such Facilities to the Facility operator.

4.4 Auxiliary Power. During any hour that the Facility is out of service, Seller or the applicable Facility operator will procure the energy used by Facility auxiliaries during that hour, the cost of which will be borne by the Buyer.

## ARTICLE V

### PRICING

5.1 Monthly Payments. For each calendar month during the Delivery Period, Buyer shall pay Seller an amount (the “**Monthly Payment**”) equal to the sum of (i) a Fuel Payment, (ii) an O&M Payment, (iii) a Depreciation Payment, (iv) a Capacity Payment, (v) a Tax Reimbursement Payment, and (vi) Other Miscellaneous Payment. The Monthly Payment will be Seller’s sole compensation for Seller’s sale and delivery to Buyer of Buyer’s Contractual Capacity and the Energy and Ancillary Services associated with Buyer’s Contractual Capacity.

5.2 Fuel Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the “**Fuel Payment**”) equal to the Fuel Costs incurred by or invoiced to Seller at the Facilities for that month.

5.3 O&M Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the “**O&M Payment**”) equal to the Operation and Maintenance Costs at the Facilities for that month.

5.4 Depreciation Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the “**Depreciation Payment**”) equal to the sum of the depreciation expenses incurred by Seller for each Facility in Schedule A at the actual rate of depreciation during the relevant month and, in the case of jointly owned units, those expenses directly related to its ownership interest in the applicable Facility. The depreciation rates will be updated periodically at intervals that will not exceed five (5) years and the new rates will become effective on the subsequent January 1<sup>st</sup> during the Term of this Agreement. Any positive net book value at the end of the commercial life of a given Facility will be included in the net book value of the other units at the same Facility and depreciated at an adjusted rate of those other units. If the final Facility or Facilities at a plant are retired, any remaining net book value will be payable by Buyer at that time, unless the Parties mutually agree upon an alternative payment arrangement.

5.5 Capacity Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the “**Capacity Payment**”) equal to the following:

$$CapacityPayment = \frac{FNBV \times WACOC}{12}$$

where,

FNBV = Seller’s Net Book Value of the Facilities.

WACOC = (DP% x LTDR) + (EP% x ROE)

LTDR	=	Seller's Long Term Debt Rate
ROE	=	Seller's Return on Equity
DP%	=	Seller's Debt Percentage
EP%	=	Seller's Equity Percentage

Each component of the Capacity Payment that is subject to change under the terms of this Agreement will be updated as of January 1<sup>st</sup> of each calendar year during the Term of this Agreement, or at more frequent intervals as elected by Seller.

5.6 Tax Reimbursement Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the "**Tax Reimbursement Payment**") equal to all Taxes (other than taxes included in Sections 5.2 through 5.5, above, such that there will be no duplication of Tax reimbursement to Seller) for that month applicable to Buyer's Contractual Capacity and the Energy and Ancillary Services associated with Buyer's Contractual Capacity, as more fully set forth in Article IX. Any Tax based upon income, gross receipts, commercial activity, or any similar Tax for which the inclusion of such Tax in the Monthly Payment would increase Seller's liability for any Tax including WACOC shall be grossed-up so as to make the receipt of any such Tax neutral to the Seller. Any Tax for any Straddle Period shall be included in the Monthly Payment based upon the ratio of the days in the month for the Monthly Payment over the total number of days in the Tax Period. Taxes included in the Monthly Payment may be estimated by Seller. The difference between estimated Taxes and the actual Taxes for which Buyer is responsible will be billed or credited to Buyer, as appropriate, in one or more installments following the end of the relevant Tax Period. For purposes of Taxes subject to the provisions of this Section 5.6, all Taxes shall be based upon the amount accrued for the relevant calendar month billing period, including any deferred tax amount.

5.7 Other Miscellaneous Payment.

For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the "Other Miscellaneous Payment") which shall include:

(A) Any other costs and credits as described within this Agreement not already included in the other payment components or any other costs or credits reasonably associated with the Facilities which may be billed monthly or if incurred less frequently, on either a quarterly or as incurred basis. For example, the Parties understand and agree that the cost of Ancillary Services associated with the Facility Capacity that are requested and delivered in accordance with regular dispatch of a Facility in accordance with this Agreement is included in and compensated for by the Monthly Payment. The Other Miscellaneous Payment shall also include, but not necessarily be limited to, any PJM charges and credits associated with the Facilities.

(B) Where Buyer exercises its right under Section 2.3 to terminate this Agreement or an Early Termination Date is declared due to a Buyer Event of Default, Seller will invoice Buyer, and Buyer shall pay Seller, an amount equal to the sum of the then undepreciated net book value of the Generating Facilities and the expected retirement-related costs associated with such

Generating Facilities at the time this Agreement is terminated as determined by the Seller in a commercially reasonable manner.

(C) Where the Parties exercise their right under Section 2.4 to remove Unit(s) or Facilities terminate this Agreement, Seller will invoice Buyer, and Buyer shall pay Seller, an amount, determined by Seller in a commercially reasonable manner, equal to the sum of the then undepreciated net book value of the Unit(s) or Generating Facilities that are to be removed from this Agreement and the expected retirement-related costs associated with such Unit(s) or Generating Facilities at the time the Unit(s) or Facilities are removed from this Agreement. At Buyer's request and at Buyer's sole expense, the fair market value of the Unit(s) or Facilities, including all of the associated liabilities thereto will be determined by Seller, such values may be developed by Seller through the use of an independent appraisal or other competitive solicitation conducted by Seller to obtain bids to purchase the Unit(s) or Generating Facilities. To the extent any appraisal or competitive solicitation would result in positive revenues to Seller as a result of such sale, Seller will apply a credit on Buyer's invoice for such positive revenues, up to, but not exceeding, the amount invoiced by Seller hereunder. Seller retains the right of first refusal to match any bona fide offer that complies with all of the terms of any competitive solicitation. Where there is a disagreement over a retirement date for Unit(s) or Facilities and this Agreement is terminated under Section 2.4, in the event Seller intends to continue operating such Unit or Facility after it is removed from this Agreement in accordance with Section 2.4, Seller will also apply a credit to Buyer's invoice referenced above with respect to allocating the retirement related costs of such Unit(s) or Facilities to account for the additional time Seller intends to operate the Unit(s) or Facilities after it is removed from this Agreement, in relation to the period of time Buyer purchased Energy and Capacity from such Unit(s) or Facilities hereunder.

## ARTICLE VI

### BILLING AND PAYMENT

6.1 Billing and Payment. The calendar month shall be the standard period for all payments under this Agreement. As soon as practicable after the end of each month, Seller will render to Buyer an invoice for the payment obligations incurred during the preceding month. Each component of the invoice will be described in reasonable detail. All invoices under this Agreement shall be due and payable on or before the twentieth (20<sup>th</sup>) day of each month, or tenth (10<sup>th</sup>) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day. Buyer will make payments by electronic funds transfer to the account designated by Seller, or by other mutually agreeable method(s). Any amounts not paid by the due date will be deemed delinquent and will accrue interest at the then current short term borrowing rate of the Seller ("Interest Rate"), such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full.

6.2 Books and Records; Audit. Seller shall keep, or shall cause to be kept, all necessary books of record, books of account, and memoranda of all transactions involving the Facility, in conformance, where required, with the FERC's Uniform System of Accounts. Seller shall make, or shall cause to be made, all computations relating to the Facilities and all allocations of the costs and expenses of the Facilities. Buyer has the right to examine the records of Seller to the extent reasonably necessary to verify the accuracy of any statement, charge or

computation made pursuant to this Agreement (including any statements evidencing the quantities delivered to Buyer at the Delivery Point) within twelve (12) months of receipt of the statement, charge or computation. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly, along with interest accrued at the Interest Rate, provided, however, that any claim by a Party for overpayment or underpayment with respect to an invoice is waived unless the other Party is notified of the claim within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.

6.3 Netting of Payments. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other under this Agreement through netting, in which case all amounts owed by each Party to the other Party under this Agreement, including any related damages, interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

## ARTICLE VII

### CREDIT REQUIREMENTS

7.1 Credit Assurances. If a Party (the “**Requesting Party**”) has reasonable grounds to believe that the other Party’s (the “**Posting Party**”) creditworthiness or performance under this Agreement has become unsatisfactory, the Requesting Party will provide the Posting Party with written notice requesting Performance Assurance in an amount determined by the Requesting Party in a commercially reasonable manner. Upon receipt of such notice, the Posting Party shall remedy the situation within a reasonable period (not exceeding thirty (30) days) by providing such Performance Assurance to the Requesting Party.

7.2 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent either or both Parties deliver Performance Assurance hereunder, each Party (a “**Pledgor**”) hereby grants to the other Party (the “**Secured Party**”) a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Secured Party, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Secured Party’s first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Non-Defaulting Party may do any one or more of the following: (i) exercise any of the rights and remedies of a Secured Party with respect to all Performance Assurance, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the Defaulting Party in the possession of the Non-Defaulting Party or its agent; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all Performance Assurance then held by or for the benefit of the Secured Party free from any claim or right of any nature whatsoever of the Defaulting Party, including any equity or right of purchase or redemption by the Defaulting

Party. The Secured Party shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Pledgor's obligations under the Agreement (the Pledgor remaining liable for any amounts owing to the Secured Party after such application), subject to the Secured Party's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

## ARTICLE VIII

### EVENTS OF DEFAULT, REMEDIES & LIMITATIONS

8.1 Events of Default. An "**Event of Default**" shall mean, with respect to a Party (a "**Defaulting Party**"), the occurrence of any of the following:

- (i) the failure to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within ten (10) Business Days after written notice;
- (ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and if not remedied within thirty (30) Business Days after written notice;
- (iii) the failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default), if such failure is not remedied within thirty (30) Business Days after written notice;
- (iv) such Party becomes Bankrupt;
- (v) the failure of such Party to satisfy the creditworthiness/collateral requirements agreed to pursuant to Article VII; or
- (vi) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another Person and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee Person fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a Party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party.

8.2 Remedies. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (the "**Non-Defaulting Party**") shall have the right, at its sole discretion, to take any one or more of the following actions: (i) to exercise any rights and remedies under this Agreement or law with respect to any Performance Assurance or other financial assurance; (ii) to withhold any payment due to the Defaulting Party under this Agreement; (iii) to suspend its performance; (iv) to cancel this Agreement by declaring a date for its early termination (an "**Early Termination Date**"); or (v) exercise such other rights or remedies it may have in contract, in equity, or at law. An Early Termination Date shall not relieve a Party of its obligation to payments hereunder. None of the remedies conferred upon the Parties above is intended to be exclusive of any other remedy or remedies now or hereafter

existing and every such remedy will be cumulative and shall be in addition to the remedies set forth above and every other remedy. Each party may commence such suits, actions or proceedings, at law or in equity, including suits for specific performance, as may be necessary or appropriate to enforce this Agreement.

8.3 Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. FOR BREACH OF ANY PROVISION OF THIS AGREEMENT, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES ONLY, SUCH DIRECT DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

## ARTICLE IX

### TAXES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the parties to minimize all Taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Taxes. Subject to reimbursement by Buyer as set forth in Article V, Seller shall pay or cause to be paid all Taxes imposed on or with respect to the Buyer's Contractual Capacity and associated Energy and Ancillary Services arising prior to the Delivery Point. Buyer shall pay the Tax Reimbursement Payment and pay or cause to be paid all Taxes on or with respect to the Buyer's Contractual Capacity and associated Energy and Ancillary Services at and from the Delivery Point. In the event Seller is required by law or regulation to remit or pay Taxes which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Taxes as set forth in Article V. If Buyer is required by law or regulation to remit or pay Taxes which are Seller's responsibility hereunder, Buyer may deduct the amount of any such Taxes from the sums due to Seller under Article V of this Agreement. Nothing shall obligate or cause a Party to pay or be liable to pay any Taxes for which it is exempt under the law.

9.3 Change-in-Law Taxes. Buyer shall be responsible for (or receive the benefit of) all Change-in-Law Taxes.

9.4 Exemptions. Either Party, upon written request of the other, shall provide a certificate of exemption or other reasonably satisfactory evidence of exemption if either Party is exempt from any Taxes and shall use all reasonable efforts to obtain or maintain, or to enable the

other Party to obtain or maintain, any exemption from or reduction of any Taxes, whether currently available or becoming available in the future. Without limiting the generality of the foregoing, the Parties agree that, if beneficial to the efforts of either Party to obtain or maintain any exemption from or reduction of any Taxes, whether currently available or becoming available in the future, the Parties will cooperate to restructure the transactions contemplated by this Agreement so as to enable either Party to obtain or maintain such exemption or reduction, as the case may be; provided, however, that any such restructuring shall not affect adversely the economic consequences of this Agreement to either Party or subject either Party to any regulatory jurisdiction other than that to which it is subject on the date set forth in the preamble to this Agreement.

## ARTICLE X

### COMPLIANCE WITH LAWS; ADMINISTRATION

10.1 Seller's Compliance. Seller shall, at its expense, comply with all applicable laws and obtain and maintain all Governmental Approvals applicable to Seller and/or the Facilities or necessary for Seller's performance of its obligations hereunder. Notwithstanding the foregoing, Seller shall not be deemed in default of this obligation if it is contesting the application, interpretation, order, or other legal direction or Governmental Approval of any Governmental Authority in good faith and with due diligence through appropriate proceedings and if such non-compliance does not have a material adverse effect on Seller's performance of this Agreement. Seller agrees to adhere to the applicable operating policies, criteria and guidelines of NERC.

10.2 Buyer's Compliance. Buyer shall at its expense, at all times, comply with all applicable laws and obtain and maintain all Governmental Approvals applicable to Buyer or necessary for Buyer's performance of its obligations hereunder. Notwithstanding the foregoing, Buyer shall not be deemed in default of this obligation if Buyer is contesting the application, interpretation, order, or other legal direction or Governmental Approval of any Governmental Authority in good faith and with due diligence through appropriate proceedings and if such non-compliance does not have a material adverse effect on Buyer's performance of this Agreement. Buyer agrees to adhere to the applicable operating policies, criteria and guidelines of the NERC.

10.3 Administration. Seller will promptly provide Buyer with copies of all written notices from the operator or other co-owners pertaining to the Facilities that materially affect, or potentially materially affect, Buyer's rights and obligations under this Agreement, including all invoices, budgets, maintenance schedules, outage/derating notices, availability forecasts, and material contracts, to the extent not restricted by an obligation of confidentiality for which Seller cannot obtain a waiver or other appropriate relief. At all times during the Term, Seller shall cause the Facility operator to perform its responsibilities and otherwise discharge its obligations in respect of the applicable Facility, and maintain accurate records regarding the foregoing, in accordance with all relevant Governmental Approvals and all applicable statutes, codes, regulations, standards, and guidelines adopted by Governmental Authorities, NERC and the Transmission Operator from time to time.

10.4 Operating Committee. By written notice to each other, the Parties and American Electric Power Service Corporation each shall name one representative ("Representative") to act

for it in matters pertaining to the Parties' obligations under this Agreement and to develop, if necessary, operating procedures for the generation, delivery and receipt of Energy hereunder, and such other mutually agreed upon contract administration procedures. Any Party may change its Representative at any time by written notice to the other Parties. The Representatives for the respective Parties shall comprise the Operating Committee. The Representative for American Electric Power Service Corporation shall be free to express the views of such Party, but shall not have a vote on the Committee except in the case of a tie between the other Parties. The Operating Committee shall meet at least annually, and at such other times as any Party may reasonably request. The Parties shall cooperate in providing to the Operating Committee the information it reasonably needs to carry out its duties. The Operating Committee will review and approve decisions regarding the retirement or early retirement of any of the Facilities, annual budgets, capital expenditures, procedures and systems for dispatch and notification of dispatch, procedures for communication and coordination with respect to Facility capacity availability, discuss scheduling of outages for maintenance, as well as the return to availability following an unplanned outage, approval of material contracts for Fuel, establishment of specifications for Fuels, and other duties as assigned by agreement of the Representatives.

10.5 Seller's Negative Covenants. Seller will not take any action or fail to take any action that would cause a default by Seller under the Facility Operating Agreement(s). Seller shall not, without the prior written consent of Buyer, (i) terminate or suspend any Facility Operating Agreement(s) or its interest in such Facility, (ii) amend or modify a Facility Operating Agreement(s), or (iii) grant any waiver or consent with respect to Facility Operating Agreement(s) or its interest in such Facility that would, in the case of (ii) and (iii) above, materially affect, or potentially materially affect, Buyer's rights and obligations under this Agreement, unless Seller shall first have obtained Buyer's written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

## ARTICLE XI

### CONDITIONS

11.1 Conditions. Subject to Section 11.2 and except to the extent waived in writing by the Parties in their sole and absolute discretion, the obligation of the Parties to consummate the transactions contemplated hereunder shall be subject to fulfillment of the following conditions:

- (i) The occurrence of the Closing.
- (ii) If required, Seller shall have filed with the FERC and received acceptance of this Agreement that is satisfactory to Seller and Buyer in their sole judgment and discretion, without any limitation thereto whatsoever.
- (iii) The Parties shall each have obtained any and all other Approvals required with respect to the performance of their respective obligations hereunder and such Approvals shall be in form and substance satisfactory to Seller and Buyer in their sole and absolute discretion.

11.2 Obligations of Buyer and Seller. Commencing on the date set forth in the preamble to this Agreement, on the terms and subject to the conditions of this Agreement, each Party shall use its commercially reasonable efforts to take, or cause to be taken, all appropriate action, and do, or cause to be done, and assist and cooperate with the other Party in taking or doing, all things necessary, proper or advisable to consummate the transactions contemplated hereby, including, without limitation the satisfaction of the conditions set forth in Section 11.1.

11.3 Failure of Conditions Generally. This Agreement may be terminated by either Party in the event that the conditions set forth in Section 11.1 are not satisfied or waived by the Parties in accordance with such Section.

## ARTICLE XII

### REPRESENTATIONS AND WARRANTIES

12.1 Representations and Warranties of Both Parties. On the date set forth in the preamble to this Agreement each Party represents and warrants to the other Party that:

- (i) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;
- (ii) subject to the fulfillment of the conditions set forth in Section 11.1, it has all Governmental Approvals necessary for it legally to perform its obligations under this Agreement;
- (iii) the execution, delivery and performance of this Agreement are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;
- (iv) this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms; subject to any Equitable Defenses;
- (v) it is not bankrupt, however evidenced, and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;
- (vi) there is not pending or, to its knowledge, threatened against it any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;
- (vii) no material breach of this Agreement with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement; and
- (viii) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to make or take delivery of the Buyer's Contractual Capacity and associated Energy and Ancillary Services.

## ARTICLE XIII

### MISCELLANEOUS

13.1 Title and Risk of Loss. Title to and risk of loss related to the Capacity and associated Energy and Ancillary Services shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Capacity and associated Energy and Ancillary Services free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any Person arising prior to the Delivery Point.

13.2 Indemnity. Each Party shall indemnify, defend and hold harmless the other Party and such Party's partners, directors, officers, employees, agents and representatives (the "**Indemnified Parties**") from and against any Claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control of, risk of loss related to, and title to the Capacity and associated Energy and Ancillary Services is vested in such Party as provided in Section 13.1, except to the extent, as to any Indemnified Party, such Claims are attributable to the gross negligence or willful misconduct of such Indemnified Party. Each Party shall indemnify, defend and hold harmless the other Party against any Taxes for which such Party is responsible under Article IX. The foregoing indemnities shall forever survive the termination of the Agreement.

13.3 Amendments and Waivers. Neither this Agreement nor any provisions hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by both Parties.

13.4 Notices. All notices, requests, statements or payments shall be made as specified in Schedule 13.4. Notices, other than notices regarding availability, Scheduling and Dispatch of a Facility shall, unless otherwise specified herein, be in writing and shall be deemed to be given or made if delivered by (a) hand delivery, electronic mail or other electronic transmission device capable of written record or facsimile, in each case, effective at the close of business on the day actually received, if received during business hours on a Business Day, otherwise shall be effective at the close of business on the next Business Day, or (b) United States mail or overnight courier service, in each case, effective on the next Business Day after it was sent. Notices regarding the availability, Scheduling and Dispatch of a Facility may be made (x) telephonically, effective when made, or (y) by electronic mail or other electronic device capable of written record, effective when received. A Party may change its notice details by providing a notice of same to the other Party in accordance herewith.

13.5 Successors and Assigns; Assignment. The provisions of this Agreement shall be binding upon and inure to the benefit of the Parties and the Parties' successors and assigns permitted hereby and no other Person shall acquire or have any rights under or by virtue of this Agreement. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent may be withheld in the exercise of its sole discretion; provided, however, that either Party may, without the consent of the other Party (and without relieving itself from liability hereunder) (i) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof in connection with any financing or other financial arrangements, (ii) transfer or assign this Agreement to an Affiliate, or (iii) transfer

or assign this Agreement to a successor to all or substantially all of Seller's Schedule A Units and Facilities provided such assignee shall agree in writing to be bound by the terms and conditions of this Agreement, and, as applicable, be a qualified operator of the Schedule A Units and Facilities. In addition to the foregoing, Seller shall require as a condition of said sale, assignment or other transfer that such other Person agree in writing to be bound by the terms and conditions of this Agreement to the same extent, such that Buyer's right to purchase such products shall continue uninterrupted and in the same manner as set forth in this Agreement without material alteration.

13.6 Integration. This Agreement constitutes the entire agreement between the Parties relating to the subject matter hereof and supersedes any and all previous and understandings, oral or written, between the Parties relating to the subject matter hereof.

13.7 Acknowledgments. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.

13.8 Waiver. No failure to exercise and no delay in exercising by a Party any right, remedy, power or privilege hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any right, remedy power or privilege.

13.9 Counterparts. This Agreement may be executed by the Parties in any number of counterparts, which, taken together, shall constitute one and the same legal binding instrument. Delivery of an executed counterpart of a signature page of this Agreement by facsimile transmission shall be effective as delivery of a manually executed counterpart of this Agreement.

13.10 Headings. The headings used herein are for convenience and reference purposes only.

13.11 Confidentiality. Neither Party shall disclose the terms or conditions of this Agreement to a third party (other than the Parties' employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential) except in order to comply with any applicable law, regulation, or any exchange, control area or independent system operator rule or in connection with any court or regulatory proceeding; provided, however, that each Party shall, to the extent practicable, use reasonable efforts to prevent or limit the disclosure. Subject to the provisions of Section 8.3, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with this confidentiality obligation.

13.12 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF OHIO, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

13.13 Mobile/Sierra Doctrine. Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party, a non-party or FERC acting sua sponte, shall be the “public interest” standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956) and clarified by Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish, 554 U.S. 527 (2008), and NRG Power Marketing LLC v. Maine Public Utilities Commission, 558 U.S. 165 (2010) (the “**Mobile-Sierra Doctrine**”).

13.14 Severability. Should any provision of this Agreement be held to be invalid or unenforceable, such provision shall be invalid or unenforceable only to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable any other provision hereof.

**[signatures appear on next page]**

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be executed and delivered by their duly authorized representatives as of the date set forth in the preamble to this Agreement.

[GENCO]

By: \_\_\_\_\_  
Name:  
Title:

OHIO POWER COMPANY

By: \_\_\_\_\_  
Name:  
Title:

**Schedule A**  
**Ohio Generation Facilities**

<b>Facility</b>	<b>Unit(s)</b>	<b>Location</b>	<b>Unit Capacity (MW)</b>	<b>Seller Ownership (%)</b>	<b>Seller Ownership (MW)</b>
Cardinal	1	OH	592	100.0%	592
Conesville	4	OH	779	43.5%	339
Conesville	5	OH	405	100.0%	405
Conesville	6	OH	405	100.0%	405
Stuart	1	OH	577	26.0%	150
Stuart	2	OH	577	26.0%	150
Stuart	3	OH	577	26.0%	150
Stuart	4	OH	577	26.0%	150
Zimmer	1	OH	1,300	25.4%	330
<b>Total</b>			<b>5,789</b>		<b>2,671</b>

## **SCHEDULE 13.4**

### **Notice Information**

#### **If to Seller:**

[GENCO]  
155 W. Nationwide Blvd. Suite 400  
Columbus, Ohio 43215  
Attention: President

with a copy to:

[GENCO]  
One Riverside Plaza  
Columbus, Ohio 43215  
Attention: Secretary

#### **If to Buyer:**

Ohio Power Company  
One Riverside Plaza  
Columbus, Ohio 43215  
Attention: President

with a copy to:

Ohio Power Company  
One Riverside Plaza  
Columbus, Ohio 43215  
Attention: Secretary

OHIO POWER COMPANY'S RESPONSES TO  
INDUSTRIAL ENERGY USERS-OHIO DISCOVERY REQUESTS  
PUCO CASE NO. 14-1693-EL-RDR  
FOURTH SET

Exhibit JAL-3  
Page 1 of 2

**INTERROGATORY**

INT-4-004     Is it AEP-Ohio's position that the PPA Rider will need to be reauthorized by the Commission following its current electric security plan ("ESP")?

**RESPONSE**

The Company objects to this request as seeking a legal conclusion or opinion that is not attributable to a witness and is more appropriate for briefing and argument by counsel, and which the Company reserve the right to further address in those contexts. In any case, the Company's views, however, do not limit or restrict the bases upon which the Commission may rely in approving the proposed rider. Without waiving the foregoing objection(s) or any general objection the Company may have, the Company states as follows. The Opinion and Order in Case Nos. 13-2385-EL-SSO et al. approved the PPA Rider for the ESP III term.

Prepared by: Counsel

OHIO POWER COMPANY'S RESPONSES TO  
INDUSTRIAL ENERGY USERS-OHIO DISCOVERY REQUESTS  
PUCO CASE NO. 14-1693-EL-RDR  
FOURTH SET

**INTERROGATORY**

INT-4-005            Is AEP-Ohio committed to proposing an ESP that contains a PPA Rider provision in the exact same format through the remaining asset lives of the units proposed to be included in the PPA Rider?

**RESPONSE**

The Company objects to the form of the question as this request is vague, as to the meaning of the "exact same format." Without waiving the foregoing objection(s) or any general objection the Company may have, the Company states as follows. The Company's long-term commitment was explained on pages 18-19 of its March 27, 2015 Application for Rehearing in Case Nos. 13-2385-EL-SSO et al.

Prepared by: Counsel

OHIO POWER COMPANY'S RESPONSES TO  
INDUSTRIAL ENERGY USERS-OHIO DISCOVERY REQUESTS  
PUCO CASE NO. 14-1693-EL-RDR  
FOURTH SET

Exhibit JAL-4

**INTERROGATORY**

INT-4-006            Does AEP-Ohio believe the PPA Rider could be authorized as part of a Market Rate Offer ("MRO") pursuant to R.C. 4928.142?

**RESPONSE**

Objection, the Company is unable to answer the hypothetical question posed in the absence of pertinent assumptions such as whether the PPA Rider was first authorized in an ESP and in existence at the time of the future MRO term. The Company objects to this request as seeking a legal conclusion or opinion that is not attributable to a witness and is more appropriate for briefing and argument by counsel and which the Company reserve the right to further address in those contexts. In any case, the Company's views, however, do not limit or restrict the bases upon which the Commission may rely in approving the proposed rider. Without waiving the foregoing objection(s) or any general objection the Company may have, the Company states as follows. While the Commission authorized the current PPA Rider for the term of the current ESP, that does not mean that all future PPA Rider authorizations would be so limited. In any case, AEP Ohio and the Commission have relied upon the ESP statute in authorizing the current PPA Rider.

Prepared by: Counsel

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**9/11/2015 12:56:00 PM**

**in**

**Case No(s). 14-1693-EL-RDR, 14-1694-EL-AAM**

Summary: Testimony Exhibits to Testimony (Exhibits JAL-1 thru JAL-4) of Jonathan A. Lesser, Ph.D. on Behalf of Industrial Energy Users-Ohio electronically filed by Mr. Matthew R. Pritchard on behalf of Industrial Energy Users-Ohio