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June 28, 2010

**Via Electronic Filing**

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Re: *PPL Corporation and E.ON U.S. LLC*  
Application for Authorization Under Section 203 of the Federal Power  
Act, Request for Waivers of Filing Requirements, and Confidential  
Treatment of Agreement and Workpapers  
Docket No. EC10-\_\_\_\_-000

Dear Secretary Bose:

Pursuant to Section 203 of the Federal Power Act ("FPA"), 16 U.S.C. § 824b (2006), and Part 33 of the Regulations of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. Part 33 (2010), PPL Corporation ("PPL") and E.ON U.S. LLC ("E.ON US"), on behalf of its public utility subsidiaries (collectively, the "Applicants"), submit for filing an application seeking all prior authorizations necessary to permit PPL to acquire all of the issued and outstanding limited liability company interests of E.ON US ("Application").

In accordance with 18 C.F.R. § 388.112, the Applicants request privileged treatment for certain portions of Exhibit I to the Application and the confidential workpapers of Dr. Joseph P. Kalt and Mr. A. Joseph Cavicchi. The information contained in certain portions of Exhibit I and the workpapers is privileged and confidential, and public disclosure of the information contained in this material may cause substantial harm to the Applicants or place them at a competitive disadvantage. In addition, certain portions of the workpapers are covered by a confidentiality agreement restricting their public disclosure.

The Applicants are submitting a complete Application electronically, including the confidential material marked "Protected Material Contains Privileged Information – Do Not Release." The workpapers of Dr. Kalt and Mr. Cavicchi will be filed

Ms. Kimberly D. Bose, Secretary  
June 28, 2010  
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separately by delivering two disks to the Commission. The disk labeled "Public Version of Kalt-Cavicchi Workpapers" contains information that may be posted publicly. The disk labeled "Privileged Version of Kalt-Cavicchi Workpapers" contains proprietary information and should be placed in the Commission's non-public files.

If you should have any questions regarding this filing, please contact the undersigned or Andrew Young at (202) 778-9125 (Andrew.Young@klgates.com).

Sincerely,



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*Attorney for PPL Corporation  
on Behalf of the Applicants*

Enclosures

cc: Governor and State Commission of Each Affected State

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

PPL Corporation  
E.ON U.S. LLC

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Docket No. EC10-\_\_\_\_-000

**Contains Request for Privileged Treatment**

**APPLICATION FOR APPROVAL PURSUANT TO  
SECTION 203 OF THE FEDERAL POWER ACT**

**Volume 1 of 3**

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Dated: June 28, 2010

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Exhibit B	Subsidiaries and Affiliates
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Appendix 3	Workpapers of Dr. Joseph P. Kalt and Mr. A. Joseph Cavicchi (Privileged Version)
Exhibit I	Purchase and Sale Agreement (Privileged Version)

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>PPL Corporation</b>	)	
	)	<b>Docket No. EC10-____-000</b>
<b>E.ON U.S. LLC</b>	)	
	)	

**APPLICATION FOR APPROVAL PURSUANT TO  
SECTION 203 OF THE FEDERAL POWER ACT**

Pursuant to Sections 203(a)(1) and 203(a)(2) of the Federal Power Act (“FPA”),<sup>1</sup> and Part 33 of the regulations of the Federal Energy Regulatory Commission (“Commission”),<sup>2</sup> PPL Corporation (“PPL”) and E.ON U.S. LLC (“E.ON US”), on behalf of its public utility subsidiaries (collectively hereinafter, the “Applicants”),<sup>3</sup> jointly submit this application (“Application”) seeking all prior authorizations necessary to permit PPL to acquire all of the issued and outstanding limited liability company interests of E.ON US (the “Transaction”).<sup>4</sup>

The Applicants respectfully request, consistent with Commission precedent, that the Commission grant limited waivers of its Part 33 filing requirements to the extent that the information required by Part 33 is not

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<sup>1</sup> 16 U.S.C. §§ 824b(a)(1) and 824b(a)(2) (2006).

<sup>2</sup> 18 C.F.R. Part 33 (2010).

<sup>3</sup> For purposes of this Application, E.ON US’s public utility subsidiaries are: Louisville Gas and Electric Company (“LG&E”), Kentucky Utilities Company (“KU”), LG&E Energy Marketing, Inc. (“LEM”), Electric Energy Inc. (“EEInc”), and Midwest Electric Power, Inc. (“MEPI”), all of which are described in Section II.B, *infra*.

<sup>4</sup> All subsidiaries of E.ON US that are public utilities subject to the Commission’s jurisdiction require approval under FPA Section 203(a)(1)(A), 16 U.S.C. § 824(a)(1)(A), for the indirect disposition of jurisdictional facilities resulting from the change in upstream control. As a holding company that owns electric utility subsidiaries, PPL requires approval under FPA Section 203(a)(2) for the acquisition of a holding company, E.ON US, that also owns electric utility subsidiaries. In addition, to the extent the Commission believes the public utility subsidiaries of PPL also require authorization for the Transaction under FPA Section 203(a)(1)(B), 16 U.S.C. § 824(a)(1)(B), the Applicants respectfully request that the Commission treat these entities as applicants.

necessary to determine that the Transaction meets the statutory requirements of FPA Section 203.<sup>5</sup> In addition, pursuant to Sections 33.9 and 388.112 of the Commission's regulations,<sup>6</sup> the Applicants request privileged treatment for certain portions of the Company Disclosure Schedule in the Purchase and Sale Agreement dated April 28, 2010 by and between E.ON US Investments Corp., PPL, and, solely for purposes of Articles VI, IX and X thereof, E.ON AG (the "PSA"). A complete, privileged version of the Company Disclosure Schedule is attached hereto as Confidential Exhibit I. The Applicants also request privileged treatment for certain workpapers of Dr. Joseph A. Kalt and Mr. A. Joseph Cavicchi, designated as Confidential Appendix 3.

The Applicants seek to close the Transaction on or before December 31, 2010. In order to achieve this objective, the Applicants desire that all regulatory approvals (including approval of the Commission) be obtained by mid-November to permit PPL to complete necessary arrangements for replacement financing by LG&E and KU (see Section III below). To this end, the Applicants respectfully request that the Commission issue an order approving the Transaction without condition, modification, or a trial-type hearing by November 18, 2010. An order issued by November 18, 2010 will allow sufficient time to complete the steps necessary to meet the desired December 31, 2010 closing date.

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<sup>5</sup> See, e.g., *MACH Gen, LLC*, 113 FERC ¶ 61,138 (2005); *Boston Generating, LLC*, 113 FERC ¶ 61,109 (2005); *La Paloma Holding Co., LLC*, 112 FERC ¶ 61,052 (2005); *Lake Road Holding Co., LLC*, 112 FERC ¶ 61,051 (2005).

<sup>6</sup> 18 C.F.R. §§ 33.9 and 388.112.

## I. INTRODUCTION AND SUMMARY

This is an uncomplicated transaction that is being undertaken for straight-forward reasons. It will have no adverse impact on competition. Rates will not change as a result of the Transaction.<sup>7</sup> The Transaction also will not change the ability of this Commission and state commissions to regulate the Applicants. Consumers will remain protected against improper cross-subsidization, or the pledge or encumbrance of utility assets for the benefit of an associate company.

After eight years of successful ownership, E.ON AG has decided to sell LG&E and KU in order to redirect its capital to other purposes. PPL operates PPL Electric Utilities Corporation (“PPL Electric”), a well-run distribution and transmission utility in the PJM Interconnection, L.L.C. (“PJM”) regional transmission organization (“RTO”). It also owns generation in the highly competitive PJM, ISO New England, Inc. (“ISO New England”), and Pacific Northwest markets.<sup>8</sup> PPL desires to rebalance itself more toward the regulated side of the electric power business. Because of LG&E’s and KU’s experience, talent, values and proven track record of successful operations, the inclusion of LG&E and KU within the PPL family of companies presents a unique opportunity to acquire an organization that shares PPL’s focus and success in providing cost-effective service to customers and constructive relationships with regulators.

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<sup>7</sup> The Applicants’ hold harmless commitment with respect to rates is explained fully in Section IV.B, *infra*.

<sup>8</sup> PPL also owns two distribution utilities in southwest England and Wales.



Accordingly, the most critical fact for LG&E's and KU's customers, and the Commission and state regulators, is that essentially nothing will change as a result of the Transaction. Thus:

- Wholesale power customers within the LG&E/KU balancing authority area ("BAA")<sup>9</sup> will continue to be protected by cost-based rate restrictions on LG&E, KU and their affiliates, including their new PPL affiliates;
- LG&E's and KU's generation will continue to be dedicated to serving their native load customers with limited participation in external markets;
- LG&E's and KU's current wholesale power and transmission customers will be held harmless from costs associated with the Transaction as explained in Section IV.B below;
- The Transaction will not have any impact on the commitments made in connection with LG&E's and KU's withdrawal from the Midwest Independent Transmission System Operator, Inc. ("MISO");
- LG&E's and KU's wholesale power requirements customers are currently subject to transparent formula rates that will not change as a result of the Transaction;
- LG&E's and KU's transmission customers will continue to be subject to transparent formula transmission rates that will not change as a result of the Transaction;
- LG&E's and KU's joint Open Access Transmission Tariff ("OATT") will continue to be administered by Southwest Power Pool ("SPP") and Tennessee Valley Authority ("TVA") will continue to serve as LG&E's and KU's reliability coordinator;
- LG&E and KU will continue to be part of a holding company system under the Public Utility Holding Company Act of 2005 ("PUHCA 2005")<sup>10</sup> served by the same PUHCA-regulated centralized service company that serves them now;

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<sup>9</sup> LG&E and KU operate jointly a single BAA. See *infra* at II.B.1.

<sup>10</sup> *PPL Corp.*, FERC-65 Notification of Holding Company Status, Docket No. HC06-1-000 (filed June 13, 2006).

- The Kentucky Public Service Commission (“KPSC”), Virginia State Corporation Commission (“VSCC”), and Tennessee Regulatory Authority (“TRA”) will continue to have full access to LG&E’s and KU’s books and records, and their regulatory authority will in no way be impaired by the Transaction;
- LG&E’s and KU’s wholesale and retail customers will continue to be fully protected by state law and regulation supplemented by extensive regulatory commitments against improper cross-subsidization, or the pledge or encumbrance of utility assets for the benefit of an associate company;
- Day-to-day operations of LG&E and KU will continue to be run from Kentucky by their existing management teams; and
- LG&E and KU will continue to work with their state regulators on clean coal, alternative energy and demand response initiatives.

At the time same time, there will be only minimal changes to the operation

of PPL’s public utility affiliates:

- Although PPL’s public utility affiliates do not participate in the LG&E/KU BAA market, if they do so in the future, they will be subject to the same restrictions on their market-based rate authority to which LG&E, KU, and their affiliates are subject;
- Although PPL’s franchised public utility, PPL Electric, has no captive customers, LG&E and KU do have captive customers and thus PPL’s public utility affiliates will be subject to the affiliate restrictions of Section 35.39 of the Commission’s regulations with respect to transactions with LG&E and KU;
- PPL will no longer qualify for a waiver from certain requirements of PUHCA 2005 as a single state holding company system; and
- PPL’s centralized service company will become subject to the Uniform System of Accounts for Centralized Service Companies under PUHCA 2005, but this will not affect the protection of PPL’s retail distribution customers that already exists under Pennsylvania law and regulation and PPL Electric’s ongoing ring-fencing commitments, against improper cross-subsidization or the pledge or encumbrance of utility assets for the benefit of an associate company.

In sum, while the proposed Transaction addresses very specific and focused corporate goals of both PPL and E.ON AG, it does not raise any issues or concerns relevant to the criteria that the Commission uses to assess transactions under FPA Section 203. The Transaction will have no adverse impact on competition, rates or regulation. Retail and wholesale customers of PPL's and E.ON US's respective subsidiaries will remain well protected against improper cross-subsidization or the pledge or encumbrance of utility assets for the benefit of an associate company. PPL's proposed acquisition of E.ON US will simply bring a well-run, traditionally regulated utility into the PPL family of companies.

## **II. DESCRIPTION OF THE APPLICANTS AND CERTAIN AFFILIATES**

### **A. PPL Corporation**

PPL is a holding company within the meaning of PUHCA 2005.<sup>11</sup> It currently has a waiver from certain of the Commission's regulations under PUHCA 2005 as a single-state holding company system.<sup>12</sup> An organizational chart depicting the current relationship between PPL and its subsidiaries prior to the closing of the Transaction is attached hereto as Exhibit C-1. A chart listing the facilities owned or controlled by PPL's public utility subsidiaries and energy affiliates is attached hereto as Exhibit B-1. PPL is the ultimate parent of the following public utilities subject to the Commission's jurisdiction.

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<sup>11</sup> *Id.*

<sup>12</sup> *PPL Corp.*, FERC-65B Waiver Notification, Docket No. PH06-107-000 (filed Sept. 22, 2006); *PPL Corp.*, Updated FERC-65B Waiver Notification Docket No. PH10-14-000 (filed April 29, 2010).

## 1. PPL Electric Utilities Corporation

PPL Electric is a direct subsidiary of PPL. PPL Electric has market-based rate authority<sup>13</sup> and owns transmission facilities located within the PJM BAA. PPL Electric currently serves approximately 1.4 million customers in 29 counties in eastern and central Pennsylvania. PPL Electric's transmission system consists of approximately 5,000 miles of transmission lines and covers a service territory of approximately 10,000 square miles. PJM directs the operation of PPL Electric's transmission facilities, and transmission service over these facilities is provided under the PJM OATT. PPL Electric has no captive wholesale or retail customers,<sup>14</sup> but it is the default supplier for retail customers within its service territory under Pennsylvania's Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. §§ 2801, *et seq.* PPL Electric purchases the energy and capacity required to satisfy its provider of last resort obligations from various non-affiliated suppliers and PPL's marketing affiliate, PPL EnergyPlus, LLC ("PPL EnergyPlus"), pursuant to a competitive supply auction program approved by the Pennsylvania Public Utility Commission ("Pa. PUC").<sup>15</sup> Pursuant to its

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<sup>13</sup> *Pa. Power & Light Co.*, 80 FERC ¶ 61,053 (1997) (market-based rate authority); *PP&L, Inc.*, Docket No. ER98-3453-000 (Letter Order issued July 28, 1998) (resale of transmission rights and associated ancillary services); *PP&L, Inc.*, Docket No. ER98-4533-000 (Letter Order issued Oct. 16, 1998) (sales to affiliates); *PP&L, Inc.*, Docket No. ER99-3294-000 (Letter Order issued July 22, 1999) (sale of specified ancillary services); *PPL Elec. Utils. Corp. et al.*, 125 FERC ¶ 61,075 (2008) (triennial market power update).

<sup>14</sup> *See PPL Elec. Utils. Corp., et al.*, Docket Nos. ER00-1712-010, *et al.* (Letter Order issued Mar. 25, 2009) (finding that PPL East companies have no captive customers and granting waiver of affiliate restrictions). Applicants believe that it is appropriate for the parties subject to this order to retain this waiver limited to those parties following the closing of the Transaction. In any event, they will file a notice of change in status following the closing of the Transaction as required by the March 25, 2009 waiver order.

<sup>15</sup> Petition of PPL Electric Utilities Corporation For Approval of a Competitive Bridge Plan, Docket No. P-00062227 (filed May 10, 2007).

obligations under the Public Utility Regulatory Policies Act of 1978, PPL Electric is obligated to purchase power from certain Qualifying Facilities (“QFs”).<sup>16</sup>

## **2. PPL EnergyPlus, LLC**

PPL EnergyPlus is an indirect, wholly owned subsidiary of PPL. PPL EnergyPlus is a power marketer authorized to sell energy, capacity and certain ancillary services at market-based rates.<sup>17</sup> PPL EnergyPlus buys and sells electricity, natural gas and energy services in the Northeastern and Western regions of the country. PPL EnergyPlus does not own or operate facilities for the generation, transmission or distribution of electric energy, although it sells wholesale power under contracts subject to the Commission’s jurisdiction. As described above, PPL EnergyPlus is one of several suppliers to PPL Electric of the electricity required by PPL Electric to fulfill its provider of last resort obligations. PPL EnergyPlus participates in the competitive supply programs of several other default service providers in PJM and other regions. PPL EnergyPlus also markets or brokers the output of the electric generating facilities owned by its affiliates. Further, PPL EnergyPlus is authorized to, and engages in, the sale of electricity at retail in several states.

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<sup>16</sup> PPL Electric sells this QF power to PPL EnergyPlus pursuant to a long-term contract accepted for filing by the Commission. *PPL Elec. Utils. Corp.*, Docket No. ER00-2537-000 (Letter Order issued July 5, 2000) (accepting for filing PPL Electric Utilities Corporation Service Agreement No. 166 under FERC Electric Tariff, First Revised Volume No. 5).

<sup>17</sup> *PP&L EnergyPlus Co.*, 85 FERC ¶ 61,377 (1998), *reh’g denied*, *PP&L EnergyPlus Co., LLC*, 95 FERC ¶ 61,154 (2001); *PP&L EnergyPlus, Co., LLC*, Docket No. ER99-3779-000 (Letter Order issued Aug. 30, 1999) (sale of ancillary services); *PPL Elec. Utils. Corp., et al.*, 125 FERC ¶ 61,075 (2008) (triennial market power update).

### 3. Other PPL Public Utility Subsidiaries

The remaining wholly owned public utility subsidiaries of PPL are all primarily engaged in the ownership and operation of generating facilities in PJM, ISO New England, or the state of Montana, as set forth below. Each is an exempt wholesale generator (“EWG”) that has been granted market-based rate authority.

#### *PJM*

Lower Mount Bethel Energy, LLC	PPL Susquehanna, LLC
PPL Brunner Island, LLC	PPL University Park, LLC
PPL Holtwood, LLC <sup>18</sup>	PPL New Jersey Solar, LLC
PPL Martins Creek, LLC	PPL New Jersey Biogas, LLC
PPL Montour, LLC;	PPL Renewable Energy, LLC <sup>19</sup>

#### *ISO New England*

PPL Great Works, LLC	PPL Wallingford Energy LLC
PPL Maine, LLC	

#### *Montana*

PPL Montana, LLC	PPL Colstrip II, LLC <sup>20</sup>
PPL Colstrip I, LLC	

The docket numbers in which each of the above public utilities was granted market-based rate authority, as well as a list of any generating facilities owned by these entities, are included in Exhibit B-1.

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<sup>18</sup> PPL Holtwood, LLC also owns 33 1/3% of the outstanding stock of Safe Harbor Water Power Corporation, which operates a hydroelectric facility in PJM.

<sup>19</sup> PPL Renewable Energy, LLC also owns a fuel cell located in Connecticut on customer property behind the interconnection meter.

<sup>20</sup> PPL Colstrip I, LLC and PPL Colstrip II, LLC currently own no generating facilities. PPL Montana, LLC’s generating facilities are located in the NorthWestern Energy Montana BAA.

## **B. E.ON US**

E.ON US is a holding company under PUHCA 2005 and the direct parent of, among others, LG&E and KU, vertically integrated public utilities with operations primarily in the Commonwealth of Kentucky. E.ON US is an indirect, wholly owned subsidiary of E.ON AG, a stock corporation formed under the laws of the Federal Republic of Germany. An organizational chart depicting the current relationship between E.ON US and its subsidiaries prior to the closing of the Transaction is attached hereto as Exhibit C-2. A chart listing the jurisdictional facilities owned or controlled by E.ON US's subsidiaries is also attached hereto as Exhibit B-2.

On July 1, 2002, E.ON AG acquired Powergen plc and, as a result of such acquisition, indirectly acquired E.ON US, which was then named LG&E Energy Corp. E.ON AG does not hold any utility assets in the United States other than its interests in E.ON US and E.ON Climate & Renewables North America, LLC ("E.ON C&R").<sup>21</sup> E.ON C&R and its subsidiaries, however, are not subsidiaries of E.ON US and, therefore, are not being transferred as part of the Transaction.

### **1. LG&E and KU**

LG&E, a direct, wholly owned subsidiary of E.ON US, is a public utility that owns and operates electric generation, transmission, and distribution facilities, and also natural gas distribution, transmission, and storage facilities in Kentucky and Indiana. KU, also a direct, wholly owned subsidiary of E.ON US, is a public

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<sup>21</sup> E.ON C&R is the parent of: (a) Munnsville Wind Farm, LLC ("Munnsville Wind Farm"), the owner of a 34.5 MW wind farm located in the NYISO BAA, and (b) Stony Creek Wind Farm, LLC ("Stony Creek Wind Farm"), the owner of a 52.5 MW wind farm located in the PJM BAA.

utility that owns and operates electric generation, transmission, and distribution facilities in Kentucky, with limited operations in Tennessee and Virginia.

Combined, LG&E and KU directly own approximately 8,273 MW (summer rated) of generation capacity and, in addition, hold minority interests in certain entities that own generation, as detailed in Exhibit B-2 hereto.<sup>22</sup> LG&E and KU serve approximately 941,000 electric customers, and LG&E serves approximately 322,000 natural gas customers.

LG&E and KU operate a joint electric BAA and own approximately 5,360 circuit miles of electric transmission lines. LG&E and KU are the only domestic entities affiliated with E.ON US that have franchised service territories.<sup>23</sup> LG&E and KU have received Commission authority to engage in wholesale sales of capacity and energy at market-based rates. Their market-based rate tariffs are currently limited to sales outside of the LG&E/KU and BREC BAAs.<sup>24</sup>

LG&E and KU provide transmission service under a single OATT. Under the terms set by the Commission in approving their withdrawal from MISO, LG&E and KU contracted with SPP and TVA to serve as an independent transmission organization (“ITO”) and a reliability coordinator, respectively, of their electric

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<sup>22</sup> This figure includes LG&E’s and KU’s share of Trimble County Unit 2, which has not yet begun commercial operation but from which test power has been generated.

<sup>23</sup> Ohio Valley Electric Corporation (“OVEC”) and EEInc, in which E.ON US has minority interests, have some transmission facilities.

<sup>24</sup> See, e.g., *Louisville Gas & Elec. Co.*, 85 FERC ¶ 61,215 (1998) (accepting for filing joint market-based rate tariff of LG&E and KU, FERC Electric Tariff, Original Volume No. 2); *Louisville Gas & Elec. Co.*, Docket No. ER02-1077-000 (Letter Order issued Apr. 16, 2002) (accepting “short form” market-based rate tariff of LG&E and KU, FERC Electric Tariff, Original Volume No. 3); *LG&E Energy Mktg. Inc.*, 113 FERC ¶ 61,229, at P 28 (2005) (finding that LG&E, KU, and LEM have failed to rebut the presumption of market power in the BREC control area); *LG&E Energy Mktg. Inc.*, Docket Nos. ER06-1046-000, *et al.* (Letter Order issued July 6, 2006) (accepting for filing revised tariff sheets prohibiting sales in the LG&E/KU and BREC control areas).



transmission facilities. In addition, TVA is responsible for coordination of the interfaces between LG&E/KU's transmission system and those functionally controlled by MISO and PJM under a Joint Reliability Coordination Agreement. By its own terms, the agreement with TVA for reliability coordination services has been automatically extended, and LG&E and KU will shortly enter into a revised ITO Agreement with SPP to continue to administer LG&E/KU's OATT for an additional two years beyond September 1, 2010.<sup>25</sup>

LG&E owns and operates approximately 379 miles of natural gas transmission mains and approximately 4,249 miles of natural gas distribution mains, the majority of which are located within Kentucky.<sup>26</sup> In addition, LG&E owns five natural gas storage fields, four of which are located in Kentucky and one of which (Doe Run) is located in both Kentucky and Indiana. These five natural gas storage fields, combined, have a working gas capacity of approximately 15.1 bcf.

LG&E and KU jointly own and operate an approximately six mile natural gas transmission pipeline within Kentucky that links the Trimble County generating facility to an unaffiliated interstate gas transmission line. KU owns and operates an approximately 11 mile natural gas transmission pipeline within Kentucky that links the Brown generating facility to unaffiliated interstate gas transmission lines.

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<sup>25</sup> *E.ON U.S. LLC*, Response to Deficiency Letter, Docket Nos. ER10-191-000, *et al.*, (filed June 14, 2010). The revised ITO agreement will be submitted to the Commission pursuant to FPA Section 205.

<sup>26</sup> Approximately ten miles of one gas transmission main associated with the Doe Run storage field is located in Indiana.

## 2. Electric Energy, Inc

KU holds a 20 percent interest in EEInc. EEInc owns and operates a six-unit coal-fired generating facility, with a capacity of approximately 1,002 MW (summer rated), located in Joppa, Illinois. EEInc's wholly owned subsidiary Midwest Electric Power, Inc. ("MEPI") owns and operates two gas turbines with a total capacity of approximately 74 MW (summer rated) also located in Joppa, Illinois (all, collectively, the "Joppa Facilities").<sup>27</sup> Output from the Joppa Facilities is under the operation and control of subsidiaries of Ameren Corporation, a public utility holding company and the majority (80 percent) owner of EEInc. Neither KU nor any affiliate of KU has contractual rights to the output of the Joppa Facilities.<sup>28</sup> LG&E, KU, and LEM submitted a Letter of Concurrence from Ameren Energy Marketing supporting this statement in their September 2, 2008 triennial market power update in Docket Nos. ER94-1188, *et al.*

In addition, EEInc owns and operates approximately 55 miles of electric transmission lines that interconnect its generating facilities to the transmission lines of LG&E, KU, and TVA.<sup>29</sup> Open access to these lines is provided pursuant

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<sup>27</sup> MEPI also operates three additional gas turbines owned by Ameren Energy Generating Company with a combined capacity of 165 MW (summer rated).

<sup>28</sup> See, e.g., *Ameren Energy Generating Co.*, FERC Form 1 for 2005 at Page 123.54, filed April 17, 2006 ("On December 22, 2005, [Ameren Energy Marketing] entered into a power supply agreement with [EEInc] whereby [EEInc] will sell 100% of its capacity and energy to [Ameren Energy Marketing]"). As a result, the competitive screen analysis submitted herewith and described below does not attribute any capacity or energy from the Joppa Facilities to KU or its affiliates.

<sup>29</sup> More specifically, these lines are comprised of six parallel lines of approximately 10 miles each in length that, for all intents and purposes, are simply generator leads that interconnect EEInc's generating facilities in Joppa, Illinois, and a transmission bus in Paducah, Kentucky.

to a Commission-filed OATT.<sup>30</sup> Further, EEInc is the sole owner of the Joppa and Eastern Railroad Company, which owns a 3.9-mile rail line and associated railcars that transport coal shipments to the Joppa Facilities.

Both EEInc and MEPI are EWGs. EEInc has received market-based rate authority from the Commission.<sup>31</sup> MEPI sells its power to EEInc on a cost-of-service basis.<sup>32</sup>

### **3. LG&E Energy Marketing, Inc.**

LEM is a power marketer that does not own any generating facilities. LEM has on file with the Commission a tariff for the sale of wholesale capacity and energy at market-based rates.<sup>33</sup> Like LG&E and KU, such authority does not extend to sales in the LG&E/KU or BREC BAAs.<sup>34</sup> LEM, however, does not presently engage in any Commission-jurisdictional power sales.

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<sup>30</sup> See *generally* Elec. Energy, Inc. Revised Open Access Transmission Tariff, Docket No. OA08-119-000.

<sup>31</sup> The docket number in which EEInc was granted market-based rate authority and list of generating facilities owned by EEInc and MEPI are included in Exhibit B-2.

<sup>32</sup> *Midwest Elec. Power, Inc.*, Docket No. ER06-442-000 (Letter Order issued Feb. 28, 2006).

<sup>33</sup> *LG&E Power Mktg., Inc.*, 68 FERC ¶ 61,247, *modified on other grounds*, 69 FERC ¶ 61,153 (1994). LEM was formerly known as LG&E Power Marketing Inc. See *LG&E Power Mktg., Inc.*, Notice of Name Change, Docket No. ER97-3418-000 (filed Jun. 24, 1997). *WKE Station Two Inc.*, 82 FERC ¶ 61,178 (1998) (accepting for filing market-based rate tariffs of WKE Station Two and WKEC).

<sup>34</sup> *LG&E Energy Mktg. Inc.*, 113 FERC ¶ 61,229, at P 28 (finding that LG&E, KU, and LEM have failed to rebut the presumption of market power in the BREC BAA); *LG&E Energy Mktg. Inc.*, Docket Nos. ER06-1046-000, *et al.* (Letter Order issued July 6, 2006) (accepting for filing revised tariff sheets prohibiting sales in the LG&E/KU and BREC BAAs).

#### **4. Ohio Valley Electric Corporation**

LG&E and KU hold a combined 8.13 percent interest in OVEC.<sup>35</sup> OVEC and its wholly owned subsidiary, Indiana Kentucky Electric Corporation (“IKEC”), own, respectively, the 986 MW (summer rated) Kyger Creek Generating Facility located in Gallipolis, Ohio, and the 1,196 MW (summer rated) Clifty Creek Generating Facility located in Madison, Indiana. Both of these facilities are located in the OVEC BAA. LG&E and KU, combined, have contractual rights to 8.13 percent of the facilities’ output. Insofar as E.ON US’s (indirect) ownership interest is less than 10 percent, E.ON US does not consider OVEC or IKEC to be an affiliate or subsidiary for purposes of this Application.<sup>36</sup>

### **III. DESCRIPTION OF THE TRANSACTION**

Pursuant to the Transaction, PPL intends to acquire all of the issued and outstanding limited liability company interests of E.ON US from E.ON AG’s indirect, wholly owned subsidiary, E.ON US Investments Corp., for a purchase price of \$7.625 billion, comprised of \$2.062 billion in cash (subject to adjustment as specified in the PSA), the repayment of outstanding debt of E.ON US, LG&E, and KU held, currently, by Fidelia Corporation (“Fidelia”), an affiliate of E.ON AG that is not being acquired by PPL (currently estimated to be \$4.638 billion), and the assumption of \$925 million in tax-exempt bonds of LG&E and KU.<sup>37</sup> The

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<sup>35</sup> More specifically, KU holds a 2.5 percent interest and LG&E holds a 5.63 percent interest.

<sup>36</sup> See 18 C.F.R. § 358.3(a). However, to the extent the Commission disagrees, E.ON US requests that the Commission treat OVEC and IKEC as applicants for purposes of this Application.

<sup>37</sup> In connection with entering into the PSA, PPL entered into an agreement with Bank of America, N.A., Banc of America Securities LLC, Merrill Lynch, Credit Suisse AG and Credit Suisse Securities (USA) LLC, under which PPL has been provided a 364-day

transactions contemplated by the PSA include the refinancing by LG&E and KU, subject to approval of the KPSC, VSCC and TRA, of unsecured notes issued by LG&E and KU to Fidelia. The Fidelia notes may temporarily be refinanced with loans from PPL or a subsidiary (other than PPL Electric),<sup>38</sup> but ultimately it is intended that the LG&E and KU indebtedness will be refinanced through the issuance of long-term debt, likely traditional utility first mortgage bonds, issued to unaffiliated investors. However, PPL, E.ON US, LG&E and KU have committed that LG&E and KU will not incur additional indebtedness, issue any additional securities, or pledge any assets of LG&E or KU to finance any part of the purchase price paid by PPL for the acquisition of E.ON US.<sup>39</sup> LG&E's and KU's financially sound credit ratings are expected to continue after the acquisition. The terms and conditions of the proposed Transaction are contained in the PSA, which is attached as Exhibit I hereto. Closing of the Transaction is conditioned on, among other things, the receipt of necessary approvals from the Commission under FPA Section 203.<sup>40</sup>

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unsecured bridge financing commitment to ensure availability of cash representing nearly 85 percent of the total purchase price. The definitive bridge loan agreement was executed and delivered by the parties thereto on June 9, 2010. PPL also has \$3.5 billion in credit capacity under other existing multi-year credit facilities. Subject to market conditions, PPL contemplates raising permanent financing in the capital markets through the issuance of debt and equity securities sufficient to pay the Transaction purchase price. On June 22, 2010, PPL entered into underwriting agreements to sell 103,500,000 shares of common stock and 23,000,000 equity units for aggregate proceeds of approximately \$3.5 billion. That transaction is expected to close on June 28, 2010.

<sup>38</sup> Multi-year revolving credit facilities with Fidelia providing for short-term borrowing from time to time will also be replaced.

<sup>39</sup> See Exhibit B to PSA ("Regulatory Commitments") at 8.

<sup>40</sup> *Id.* § 7.1(b).

E.ON US is currently an indirect, wholly owned subsidiary of E.ON AG. As a result of the Transaction, E.ON US will become a direct, wholly owned subsidiary of PPL, and E.ON US's subsidiaries will become indirect, wholly owned subsidiaries of PPL. There will be no other changes in the corporate structure of E.ON US and its subsidiaries.<sup>41</sup>

An organizational chart depicting the post-Transaction corporate organization of PPL and E.ON US is attached as Exhibit C-3.

#### **IV. THE TRANSACTION IS CONSISTENT WITH THE PUBLIC INTEREST**

Under FPA Section 203(a)(4), the Commission will approve a proposed transaction if it determines that it is consistent with the public interest and “will not result in cross-subsidization of a non-utility associate company or the pledge or encumbrance of utility assets for the benefit of an associate company, unless the Commission determines that the cross-subsidization, pledge, or encumbrance will be consistent with the public interest.”<sup>42</sup>

With regard to whether a proposed transaction is consistent with the public interest, the Commission applies a three-part test set forth in the *Merger Policy Statement*<sup>43</sup> and Order No. 642.<sup>44</sup> Specifically, the Commission examines the

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<sup>41</sup> The names of the E.ON US entities with "E.ON" in their current names will be changed after closing of the Transaction. The current names of LG&E and KU will not be changed.

<sup>42</sup> 16 U.S.C. § 824b(a)(4).

<sup>43</sup> *Inquiry Concerning the Commission's Merger Policy Under the Federal Power Act: Policy Statement*, Order No. 592, 61 Fed. Reg. 68,595 (1996), FERC Stats. & Regs. ¶ 31,044, at p. 30,111 (1996) (“Merger Policy Statement”), *reconsideration denied*, Order No. 592-A, 79 FERC ¶ 61,321 (1997).

<sup>44</sup> *Revised Filing Requirements Under Part 33 of the Commission's Regulations*, Order No. 642, FERC Stats. & Regs. ¶ 31,111, at pp. 31,874-78 (2000) (“Order No. 642”), *on reh'g*, Order No. 642-A, 94 FERC ¶ 61,289 (2001).

effect of a proposed transaction on: (i) competition, (ii) rates, and (iii) regulation. The Applicants need not show that a transaction positively benefits the public interest, but rather that it simply is consistent with the public interest.<sup>45</sup>

As demonstrated in this Application, the Transaction will have no adverse effect on competition, rates, or regulation, and therefore is consistent with the public interest. Additionally, the Transaction will not result in the cross-subsidization of a non-utility associate company or the pledge or encumbrance of utility assets for the benefit of an associate company. Accordingly, the Transaction should be approved promptly and without condition.

**A. The Transaction Will Have No Adverse Effect on Competition**

In Order No. 642, the Commission stated that its objective in analyzing a proposed transaction's effect on competition is to determine whether such disposition "will result in higher prices or reduced output in electricity markets."<sup>46</sup> The Commission has ruled that higher prices and reduced output in electricity markets may occur if FPA Section 203 applicants are able to exercise market power, either alone or in coordination with other firms.<sup>47</sup> As demonstrated herein, the Transaction will have no adverse effect on competition.

**1. The Transaction Will Have No Adverse Effect on Horizontal Competition**

The Transaction will have no adverse effect on horizontal competition. PPL's generating and power marketing affiliates historically have not made sales

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<sup>45</sup> See, e.g., *Texas-New Mexico Power Co.*, 105 FERC ¶ 61,028, at P 23 & n.14 (2003) (citing *Pac. Power & Light Co. v. FPC*, 111 F.2d 1014, 1016-17 (9th Cir. 1940)).

<sup>46</sup> Order No. 642, FERC Stats. & Regs. ¶ 31,111, at p. 31,879.

<sup>47</sup> *Id.*

into the LG&E/KU BAA or the adjacent Eastern Kentucky Power Cooperative (“EKPC”) BAA. LG&E’s and KU’s generation is committed to serving their native load and wholesale requirements customers and they make only limited sales into PJM, where most of PPL’s generation is located.<sup>48</sup> While both PPL’s and E.ON US’s public utility subsidiaries sell into MISO, those sales constitute an insignificant share of the electric power originating in and sold into that RTO. In sum, as Dr. Joseph P. Kalt and Mr. Joseph Cavicchi explain in more detail in their Affidavit, any horizontal overlap between the wholesale power sales of E.ON US’s public utility subsidiaries, on the one hand, and PPL’s public utility subsidiaries, on the other hand, is *de minimis* and, therefore, the Transaction has no meaningful impact on market concentration.<sup>49</sup>

Moreover, the Commission has previously found that even though a market is highly concentrated, as are the LG&E/KU and EKPC BAAs, if a proposed transaction does not eliminate a competitor in that market, there is no adverse impact on competition.<sup>50</sup> PPL has not historically made sales into the LG&E/KU and EKPC BAAs; therefore, the Transaction will not eliminate a competitor in the LG&E/KU or EKPC BAA and will not have an adverse impact on competition in these markets.

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<sup>48</sup> The rest of PPL’s eastern generation is located three wheels away in ISO New England. The balance of PPL’s generation is in Montana.

<sup>49</sup> See Kalt-Cavicchi Affidavit at PP 25-29.

<sup>50</sup> *Duke Energy Corp., et al.*, 113 FERC ¶ 61,297, at P 83 (2005) (“*Duke/Cinergy*”); *N. States Power Co.*, 90 FERC ¶ 61,020, at p. 61,020 (2000).



Notwithstanding the *de minimis* horizontal overlap,<sup>51</sup> the Applicants submit herewith the results of a Competitive Analysis Screen in order to facilitate expeditious consideration of this Application by the Commission. Dr. Kalt and Mr. Cavicchi present Competitive Screen Analyses of four markets: the LG&E/KU BAA and PJM BAA, where the Applicants, respectively, have generation, and the EKPC BAA and MISO BAA, two other markets which are adjacent to both the LG&E/KU BAA and PJM BAA.<sup>52</sup>

The determination of whether a proposed transaction raises horizontal competitive concerns under the Competitive Analysis Screen is measured initially by the impact that the proposed transaction has on the relevant Herfindahl-Hirschmann Index (“HHI”) for electric energy. In particular, a proposed transaction will raise concerns if: (i) the post-transaction HHI for Economic Capacity (“EC”) or Available Economic Capacity (“AEC”) is greater than 1800 *and* the transaction raises the HHI by 50 or more points; or (ii) if the post-transaction HHI is between 1000 and 1800 *and* the transaction raises the HHI 100 or more points.<sup>53</sup> Increases in HHI above these threshold levels are referred

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<sup>51</sup> Under Section 33.3(a)(2) of the Commission’s regulations, a horizontal market power analysis performed in accordance with Appendix A to the Commission’s *Merger Policy Statement* (“Competitive Analysis Screen”) is not required where the overlap between the combining entities in the relevant geographic market is *de minimis*. 18 C.F.R. § 33.3(a)(2)(i).

<sup>52</sup> OVEC is a separate BAA within MISO; however, it is a generation-only BAA with no load affected by the proposed Transaction. TVA is interconnected to both the PJM and LG&E/KU BAAs, but TVA permits only limited competition within its borders and PPL affiliates make no sales there.

<sup>53</sup> *Merger Policy Statement*, FERC Stats. & Regs. ¶ 31,044, at p. 30,134. These quantitative thresholds established by the Commission were based on the U.S. Department of Justice-Federal Trade Commission Horizontal Merger Guidelines (1992). *Id.* at p. 30,111. On April 20, 2010, however, the Department of Justice (“DOJ”) and the Federal Trade Commission (“FTC”) opened for public comment a proposal to update the Horizontal Merger Guidelines to, among other things, raise the quantitative thresholds

to as “screen violations.” In the absence of any screen violations, a proposed transaction is not considered to raise horizontal market power concerns. If screen violations are found, further analysis of the reasons for such violations is required in order to determine whether a competitive problem exists.<sup>54</sup>

Attached hereto at Appendix 3 are the Affidavit and workpapers of Dr. Kalt and Mr. Cavicchi. As described in their Affidavit, Dr. Kalt and Mr. Cavicchi analyzed the competitive impacts of the Transaction in accordance with the Commission’s regulations and Order No. 642. For each of the four geographic markets studied, Dr. Kalt and Mr. Cavicchi conducted a Delivered Price Test (“DPT”) analysis of EC and AEC<sup>55</sup> and calculated market concentrations using HHI statistics to determine the change in market concentration that will occur as a result of the Transaction. Dr. Kalt and Mr. Cavicchi’s analysis shows no screen violations, confirming that the Transaction presents no horizontal competitive concerns. A summary of Dr. Kalt and Mr. Cavicchi’s analysis and results for each relevant geographic market is provided below.

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utilized to indicate screen failures. See Horizontal Merger Guidelines for Public Comment, *available at* <http://www.ftc.gov/os/2010/04/100420hmg.pdf>. Specifically, the DOJ and the FTC have proposed to raise both the post-transaction HHI thresholds and the increase in HHI thresholds such that a proposed transaction will raise concerns only if: (i) the post-transaction HHI is greater than 2,500 and the transaction raises the HHI by 100 or more points; or (ii) if the post-transaction HHI is between 1,500 and 2,500 and the transaction raises the HHI 200 or more points. *Id.* at pp. 19-20.

<sup>54</sup> *Id.* at p. 19.

<sup>55</sup> In PJM, where most states have implemented retail competition, matching load obligations to generation units has become increasingly difficult; therefore, AEC in PJM is a less precise measure of market concentration than EC.

### a. Economic Capacity

The PJM BAA is a highly competitive, liquid market with approximately 160,000 MW of capacity (summer rated).<sup>56</sup> Under Dr. Kalt and Mr. Cavicchi's Competitive Screen Analysis, the PJM market is either unconcentrated or moderately concentrated in all periods. PPL owns or controls a maximum of 9,728 MW of economic generation in the PJM BAA, representing no more than 6 percent of total capacity in PJM. LG&E and KU do not own generation in PJM, and under the DPT there is a *de minimis* amount of capacity that enters the PJM BAA from the LG&E/KU BAA. Dr. Kalt and Mr. Cavicchi found that EC market concentration in PJM before the Transaction ranged from 734 to 1,039 HHI points in all periods tested. As a result of the Transaction, the increase in EC HHI ranged from 2 to 6 points in the PJM BAA.<sup>57</sup> Therefore, in accordance with the *Merger Policy Statement*, the Transaction will have no meaningful impact on market concentration in PJM.

LG&E and KU are vertically integrated utilities and, unsurprisingly, Dr. Kalt and Mr. Cavicchi find the LG&E/KU BAA market to be highly concentrated under the EC measure. However, there is limited interconnection between PJM and the LG&E/KU BAA, and PPL has not historically made sales into the LG&E/KU BAA. In an effort to present a conservative analysis of potential competitive concerns, Dr. Kalt and Mr. Cavicchi conducted a DPT analysis of the

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<sup>56</sup> Dr. Kalt and Mr. Cavicchi also considered the potential impact on the DPT analysis for FirstEnergy joining PJM, and then Duke Ohio joining PJM, finding that neither of the proposed expansions altered their conclusion that the proposed Transaction raised no market power concerns. Kalt-Cavicchi Affidavit at PP 30, 64-65.

<sup>57</sup> *Id.* at Exh. No. 6.

Transaction's impact on market concentration in the LG&E/KU BAA, using the DPT's theoretical squeeze down analysis of imports into the LG&E/KU BAA. This analysis indicated that, although some PPL supply could enter the LG&E/KU BAA, it has an insignificant effect on the Competitive Screen Analysis. Dr. Kalt and Mr. Cavicchi found that EC market concentration in the LG&E/KU BAA before the Transaction ranged from 3,350 to 7,080 points for all periods tested. However, as a result of the transaction, the increase in HHI ranged only from 11 to 45 points.<sup>58</sup> Therefore, even after making conservative assumptions about the possibility of supply from PPL entering into the LG&E/KU BAA, the Transaction does not result in any screen violations in the LG&E/KU BAA. Dr. Kalt and Mr. Cavicchi also note that even were the increase in HHI to exceed the Commission's screen thresholds for the LG&E/KU BAA in some periods, PPL would have no incentive or ability to withhold supply, because any supply withheld by PPL would simply be replaced by one of the other numerous suppliers in PJM that can access the LG&E/KU BAA.<sup>59</sup>

Moreover, the market-based rate authorizations held by LG&E, KU, and LEM do not permit them to sell at market-based rates in the LG&E/KU BAA.<sup>60</sup> Rather, LG&E, KU, and LEM may only sell power at cost-based rates in the LG&E/KU BAA, in the BREC BAA, and at the interfaces between these two BAAs. PPL's affiliates with market-based rate authority commit to amend their market-based rate tariffs to reflect the restrictions imposed on LG&E, KU, and

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<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at P 60.

<sup>60</sup> See *Duke/Cinergy* at P 83 n.66 (the "fundamental competitive conditions in the [Duke Power] market would not be changed by the proposed merger").

LEM as part of a change in status update pursuant to the Commission's regulations, 18 C.F.R. § 35.42, following the consummation of the Transaction.<sup>61</sup>

Similar to the LG&E/KU BAA, the EKPC BAA is highly concentrated under the EC measure, but again there is limited interconnection between PJM and the EKPC BAA, and PPL has not historically made sales into the EKPC BAA. However, as part of a conservative analysis, Dr. Kalt and Mr. Cavicchi also conducted a DPT analysis of the Transaction's impact on market concentration in the EKPC BAA, using a theoretical squeeze down analysis of imports into EKPC. Dr. Kalt and Mr. Cavicchi's analysis of the EKPC BAA did not produce any screen violations. EC market concentration in EKPC before the Transaction ranged from 2,872 to 4,580 points for all periods tested, and as a result of the Transaction, the increase in HHI ranged from 8 to 29 points.<sup>62</sup>

Like the PJM market, the MISO BAA is a highly competitive, liquid market with approximately 130,000 MW of capacity (summer rated). PPL's affiliates and E.ON US's public utility subsidiaries make occasional sales into the MISO market, but do not own or control generation in MISO. Under the DPT, there is a *de minimis* amount of capacity that enters the MISO BAA from the LG&E/KU and PJM BAAs. Dr. Kalt and Mr. Cavicchi found that EC market concentration in MISO after the Transaction was well below 1,000 points in all periods, thus qualifying MISO as an unconcentrated market.<sup>63</sup> Therefore, in accordance with

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<sup>61</sup> *See id.*

<sup>62</sup> Kalt-Cavicchi Affidavit, Exh. No. 6.

<sup>63</sup> *Id.*

the *Merger Policy Statement*, the Transaction will have no meaningful impact on market concentration.

Thus, under the Competitive Screen Analysis, the increases in horizontal market concentration in EC brought about by the Transaction are below the thresholds that the Commission has indicated may cause concern. These results confirm the straight-forward observation that any competitive overlap which exists or could exist is *de minimis* and the Transaction could not result in the exercise of market power.<sup>64</sup>

#### **b. Available Economic Capacity**

As Dr. Kalt and Mr. Cavicchi explain, there is difficulty in developing an AEC analysis for the PJM BAA. Many of the states that make up PJM have adopted retail competition, default service competitive supply auctions or both. Information regarding retail competition market shares is highly proprietary and thus difficult or impossible to obtain. States that conduct competitive supply auctions to meet default supply service obligations often do not release market share data or even auction winners.<sup>65</sup> To address these difficulties, Dr. Kalt and Mr. Cavicchi developed reasonable assumptions regarding load commitments and the generation used to serve those commitments. Employing these assumptions, Dr. Kalt and Mr. Cavicchi found that the post-Transaction AEC HHI in the PJM BAA is only above the 1,000 point threshold in one time period but the

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<sup>64</sup> In addition, the HHI increases are even further below the thresholds that the DOJ and FTC have recently considered as indicative of anticompetitive concerns. See *supra* n.54.

<sup>65</sup> Kalt-Cavicchi Affidavit at PP 48-52.

HHI change is only 10 for this period.<sup>66</sup> As a result, the AEC analysis of the PJM market also presents no screen violations.

The LG&E/KU BAA, in which PPL's public utility subsidiaries have made no historical sales, is still a traditional vertically integrated retail supply market. The AEC pre-Transaction HHIs ranged from 556 to 2,439 points, and the hypothetical market share under the DPT analysis resulted in an increase in HHIs as a result of the Transaction that ranged from 2 to 47 points.<sup>67</sup> The AEC analysis of the LG&E/KU BAA therefore presents no screen violations, and confirms the conclusion that there will be no adverse impact on competition as a result of the Transaction because, as with the EC analysis, the Transaction will not eliminate a competitor in the LG&E/KU BAA and the current restrictions on LG&E's, KU's, and LEM's market-based rate authority, and the planned restrictions on PPL's market-based rate subsidiaries, will further protect against exercises of market power in the LG&E/KU BAA.<sup>68</sup>

Nor will the Transaction have any adverse competitive impact in either the EKPC BAA or MISO BAA under the AEC analysis. Under the DPT, post-Transaction AEC HHIs in the MISO BAA are all well under the 1,000 point threshold for a defining an unconcentrated market.<sup>69</sup> Under the DPT, post-Transaction AEC HHIs in the EKPC BAA are only above 1,000 in one time period, and the HHI change is only 61 in that time period (well below the 100

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<sup>66</sup> *Id.* at Exh. No. 6.

<sup>67</sup> *Id.*

<sup>68</sup> *See Duke/Cinergy* at P 83.

<sup>69</sup> Kalt-Cavicchi Affidavit at Exh. No. 6.

point threshold).<sup>70</sup> As a result, the AEC analysis also presents no screen violations for the EKPC and MISO BAAs.

## **2. The Transaction Will Have No Adverse Effect on Vertical Competition**

The Transaction will not adversely affect vertical competition. In Order No. 642, the Commission set forth guidelines to be used in determining whether a proposed transaction will have an adverse effect on vertical competition.<sup>71</sup> The Commission's concerns with regard to vertical market power generally arise in circumstances, not present here, in which the combined entity may restrict potential downstream competitors' access to upstream supply markets or increase potential competitors' costs.

Only the following subsidiaries of the Applicants own or control jurisdictional transmission assets (other than limited interconnection facilities): PPL Electric, LG&E, KU, and EEInc. Transmission service over these facilities is provided under Commission-approved OATTs.<sup>72</sup> After consummation of the Transaction, transmission service over PPL Electric's, LG&E's, KU's, and EEInc's facilities will continue to be provided pursuant to these tariffs. Importantly, PJM will continue to direct the operations of PPL Electric's transmission facilities and provide transmission service under the PJM OATT,

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<sup>70</sup> *Id.*

<sup>71</sup> Order No. 642, FERC Stats. & Regs. ¶ 31,111, at pp. 31,904-07.

<sup>72</sup> Transmission service over PPL Electric's transmission facilities is provided under the PJM OATT. See PJM Open Access Transmission Tariff, FERC Electric Tariff, Sixth Revised Volume No. 1 ("PJM OATT"). Transmission service over LG&E/KU's transmission facilities is provided under their joint OATT. See E.ON U.S. LLC on behalf of its Operating Companies Louisville Gas & Electric Co. and Kentucky Utilities Co., FERC Electric Tariff, Fourth Rev. Vol. 1. Transmission service over EEInc's transmission facilities is provided under its OATT. See Electric Energy, Inc., FERC Electric Tariff, First Revised Volume No. 1 ("EEI OATT").



and SPP will continue to act as the independent transmission operator with respect to transmission service over LG&E's and KU's facilities. In previous transactions, the Commission has found that open access to transmission facilities provided sufficient assurance that the applicants could not use their control of transmission facilities in a manner that could harm competition.<sup>73</sup> The same conclusion should be reached here.

LG&E's ownership of natural gas distribution systems and storage facilities also does not raise any vertical market power concerns. LG&E's natural gas distribution systems and storage facilities are not connected with nor are they used to serve any non-affiliated gas-fired generating facilities. Moreover, LG&E is authorized to offer firm and interruptible natural gas storage services in interstate commerce at market-based rates.<sup>74</sup> Further, Kentucky state law and regulation requires LG&E to offer retail gas service on a non-discriminatory basis.<sup>75</sup> Finally, while LG&E does reserve interstate pipeline capacity primarily to serve its retail customers, as Dr. Kalt and Mr. Cavicchi show, there is ample interstate gas pipeline capacity in Kentucky, which is held by numerous shippers.

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<sup>73</sup> See, e.g., *TECO Wholesale Generation, Inc.*, 107 FERC ¶ 62,208 (2004).

<sup>74</sup> *Louisville Gas & Elec. Co.*, 99 FERC ¶ 62,040 (2002) (granting LG&E a limited-jurisdiction blank certificate of public convenience and necessity for authorization to offer natural gas storage services in interstate commerce at market-based rates); *Louisville Gas & Elec. Co.*, 120 FERC ¶ 62,031 (2007) (determining that LG&E qualifies for treatment as a local distribution company for purposes of transportation under Section 311 of the Natural Gas Policy Act of 1978 and confirming that LG&E may continue to provide natural gas storage services at market-based rates).

<sup>75</sup> See Ky. Rev. Stat. Ann. § 278.170(1) (2009) ("No utility shall, as to rates or service, give any unreasonable preference or advantage to any person or subject any person to any unreasonable prejudice or disadvantage, or establish or maintain any unreasonable difference between localities or between classes of service for doing a like and contemporaneous service under the same or substantially the same conditions.").

LG&E's share of that capacity is no more than 2.2%.<sup>76</sup> Accordingly, following consummation of the Transaction, LG&E will have neither the incentive nor the ability to restrict natural gas deliveries to generating facilities that compete with PPL Electric, LG&E, KU, or their affiliates.

PPL is also the indirect owner of PPL Interstate Energy Company ("IEC"). IEC owns and operates an intrastate natural gas and oil distribution system that primarily serves the Martins Creek Steam Electric Station.<sup>77</sup> This system is regulated by the Pa. PUC as a common carrier pipeline.<sup>78</sup> Additionally, because the system operates in the large and highly competitive PJM market, which is served by numerous Commission-regulated petroleum products and natural gas pipelines, there is no way in which the Transaction could create an ability to exercise vertical market power as a result of IEC's ownership of this facility.

EEInc's ownership of the Joppa and Eastern Railroad ("JER") also does not raise any vertical market power concerns. As explained above, the railroad owns only a 3.9 mile rail line and associated railcars that transport coal shipments to the Joppa Facilities. The limited size and scope of these railroad facilities do not allow them to be used to impose vertical impediments to

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<sup>76</sup> Kalt-Cavicchi Affidavit at P 76.

<sup>77</sup> IEC transports natural gas as well as oil on the northernmost segment of the IEC pipeline, which was converted in 1995 to dual natural gas/oil usage, to Martins Creek Steam Electric Station. The dual use pipeline presently has connections with two interstate natural gas pipelines.

<sup>78</sup> *Interstate Energy Co.*, 46 Pa. P.U.C. 524 (1979) (oil transportation); *Interstate Energy Co.*, 53 Pa. P.U.C. 314 (1979) (same); *Interstate Energy Co.*, Docket No. A-140200 (Order adopted Apr. 13, 1995), *aff'd with modification*, *UGI Utils., Inc. v. Pa. Pub. Util. Comm'n*, 684 A.2d 225 (Pa. Commw. Ct. 1996) (natural gas transportation for the limited purpose of electric generation). The Commission has specifically ruled that IEC is not subject to its jurisdiction under the Interstate Commerce Act. *Interstate Energy Co.*, 32 FERC ¶ 61,294 (1985).

competition or otherwise harm competitors of the Applicants. Further, the majority (80%) interest held in EEInc by subsidiaries of Ameren Corporation is sufficient to prevent E.ON US's public utility subsidiaries or, post-closing, PPL's public utility subsidiaries, from using JER to create vertical market power concerns.

LG&E and KU also own and/or lease rail cars. However, these rail cars are used exclusively to ship coal to their own electric generating facilities. Similarly, although PPL and its affiliates own rail cars, they are also used exclusively to ship coal to their own generating facilities. Therefore, the control of these rail cars does not raise any vertical market power issues.

There are no other inputs to electric power owned by the Applicants that could be used to restrict downstream competitors' access to upstream supply markets or to increase potential competitors' costs. Accordingly, there are no vertical market power concerns raised as a result of the Transaction.

### **3. The Proposed Transaction Will Not Create Other Barriers to Entry**

In prior proceedings under FPA Section 203, the Commission has considered whether a proposed transaction could enhance the applicants' ability to erect barriers to market entry in determining whether a proposed transaction may adversely impact competition.<sup>79</sup> Here, the Transaction will not provide the Applicants any ability to erect barriers to market entry. Additionally, neither the Applicants nor their affiliates own or control such a quantity of sites for new

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<sup>79</sup> See, e.g., *Texas-New Mexico Power Co.*, 105 FERC ¶ 61,028, at PP 13-14; *PECO Energy Co.*, 90 FERC ¶ 61,269, at p. 61,903 (2000); *Boston Edison Co.*, 80 FERC ¶ 61,274, at p. 61,994 (1997).

potential generation that the siting and construction of new generation is foreclosed or harmed in any way.

#### **B. The Transaction Will Have No Adverse Effect on Rates**

Under Order No. 642, the Commission must determine whether a proposed transaction will have any adverse impact on the rates charged to wholesale power and transmission customers.<sup>80</sup> The Commission has elaborated that its “main objective in applying this factor is to protect captive customers who are served under cost-based rates that could be adversely affected by a Section 203 transaction.”<sup>81</sup>

As explained herein, no such adverse impact will result from the Transaction. The Applicants pledge to hold harmless all transmission and current wholesale customers from any costs associated with the Transaction (e.g., transaction costs) for a period of five years to the extent that such costs exceed savings related to the Transaction.<sup>82</sup>

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<sup>80</sup> Order No. 642, FERC Stats. & Regs. ¶ 31,111, at pp. 31,914-15; Order No. 592, FERC Stats. & Regs. ¶ 31,044, at p. 30,123.

<sup>81</sup> *Transactions Subject to the FPA Section 203*, Order No. 669, 71 Fed. Reg. 1348, FERC Stats. & Regs. ¶ 31,200, at P 166 (2005) (“Order No. 669”), *order on reh’g*, Order No. 669-A, 71 Fed. Reg. 28,422 (May 16, 2006), FERC Stats. & Regs. ¶ 31,214 (2006) (“Order No. 669-A”), *order on reh’g*, Order No. 669-B, 71 Fed. Reg. 42,579 (July 27, 2006), FERC Stats. & Regs. ¶ 31,255 (2006) (“Order No. 669-B”).

<sup>82</sup> The Commission has found similar commitments by applicants under FPA Section 203 sufficient to alleviate any concerns regarding the impact of a proposed transaction on transmission rates. *See, e.g., Great Plains Energy Inc.*, 121 FERC ¶ 61,069, at P 48 (2007); *PNM Resources, Inc.*, 110 FERC ¶ 61,204, at P 43 (2005) (authorizing acquisition by PNM Resources of the parent of TNMP); *Ameren Corp.*, 108 FERC ¶ 61,094, at PP 62, 68 (2004); *Tucson Elec. Power Co.*, 103 FERC ¶ 62,100, at p. 64,163 (2003); *Bangor Hydro-Elec. Co.*, 94 FERC ¶ 61,049, at p. 61,242 (2001); *UtiliCorp United Inc.*, 92 FERC ¶ 61,067, at pp. 61,234-36 (2000); *Consolidated Edison, Inc.*, 91 FERC ¶ 61,225, at pp. 61,821, 61,825 (2000). This hold harmless commitment, however, is not a rate freeze and would not preclude changes in transmission rates attributable to non-Transaction costs or to the costs or value of the subject assets themselves. The Commission has accepted similar limitations on this “hold harmless”

## 1. Wholesale Power Customers

Neither PPL Electric nor any of its affiliates has captive wholesale or retail power customers. All contracts under which PPL's public utility subsidiaries provide wholesale power service are entered into pursuant to market-based rate authority. Accordingly, these contracts cannot impose any costs related to the Transaction on its wholesale power customers and, therefore, all of these wholesale power customers are shielded from any adverse rate effects of the Transaction.

E.ON US's public utility subsidiaries provide wholesale power service under a variety of contract types.<sup>83</sup> First, KU sells wholesale power to certain municipal utilities under long-term agreements which establish cost-based wholesale power rates based on a formula rate on file with the Commission.<sup>84</sup> Transparent formula rates enable the Commission to enforce the Applicants' hold harmless commitment to prevent the pass through to customers of costs related to the Transaction.

Second, LG&E and KU sell short-term wholesale power to certain entities under agreements entered into under the terms of their cost-based rate tariff for

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commitment. See, e.g., *PNM Resources, Inc.*, 110 FERC ¶ 61,204, at P 43; *Ameren Corp.*, 108 FERC ¶ 61,094, at P 62; *Tucson Elec. Power Co.*, 103 FERC ¶ 62,100, at p. 64, 163, n.3.

<sup>83</sup> The Applicants note that E.ON AG, E.ON US's parent, owns additional assets, including public utilities that are not subsidiaries of E.ON US and therefore not subject to the Transaction. Insofar as these non-E.ON US assets of E.ON AG are not being acquired by PPL, the Applicants respectfully submit that there is no need to analyze the rate impact or other effects of the Transaction on these non-E.ON US entities.

<sup>84</sup> See *Ky. Utils. Co.*, 125 FERC ¶ 61,242 (2008).

short-term energy sales.<sup>85</sup> The prices for these sales, which are generally spot in nature, are capped at 110 percent of the LG&E/KU system incremental cost. Insofar as the rates for these sales are negotiated (subject to the cap) and the costs related to the Transaction do not factor into calculation of the cap, customers under these agreements are shielded from any rate effects of the Transaction.

Third, LG&E and KU also sell wholesale power pursuant to contracts entered into under their respective market-based rate tariffs. Insofar as such sales are market-based in nature, these contracts cannot impose any costs related to the Transaction on their customers and, therefore, these wholesale power customers are shielded from any adverse rate effects of the Transaction.<sup>86</sup>

Fourth, EEInc presently sells wholesale power exclusively at market-based rates.<sup>87</sup> Insofar as such sales are market-based in nature, EEInc cannot impose any costs related to the Transaction on its customers and, therefore, these wholesale power customers are shielded from any adverse rate effects of the Transaction.

## **2. Transmission Customers**

The Transaction will also have no adverse effect on the transmission service rates of the Applicants' transmission-owning public utilities. As discussed

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<sup>85</sup> See *generally* LG&E/KU, Revised Cost-Based Tariff Sheets, Docket No. ER06-1438-000 (filed Nov. 3, 2006).

<sup>86</sup> The Transaction can have no effect on the rates of EEInc, since LG&E and KU have no rights to the output of its generating facilities. See *supra* n.28.

<sup>87</sup> EEInc is also party to cost-based wholesale power sales contracts with the Department of Energy and TVA but does not presently make sales under these agreements. MEPI sells its power to EEInc on a cost-of-service basis. *Midwest Elec. Power, Inc.*, Docket No. ER06-442-000 (Letter Order issued Feb. 28, 2006).

above, transmission service over the transmission facilities of PPL Electric, LG&E, KU, and EEInc is provided under applicable OATTs. PPL Electric, LG&E, and KU provide transmission service at formula rates in accordance with their respective OATTs.<sup>88</sup> The transparency of these formula rates, combined with Commission oversight, ensures that the Applicants' hold harmless commitment will be honored and Transaction-related costs will not be passed through to transmission customers. Transaction-related costs also cannot automatically be passed through into EEInc's transmission rates because EEInc only provides firm and non-firm point-to-point transmission service at stated rates.<sup>89</sup> Therefore, the Applicants' transmission customers are shielded from any costs related to the Transaction.

### **C. The Transaction Will Have No Adverse Effect on Regulation**

Pursuant to Order No. 642, the Commission requires applicants to evaluate the effect of a proposed transaction on regulation both at the federal and state levels. The Commission has indicated that it may set an FPA Section 203 application for hearing if the affected state commissions do not have authority to act on the proposed transaction and they raise concerns about the effect on regulation.<sup>90</sup>

In addition, although the Energy Policy Act of 2005 ("EPAct 2005") eliminated any concern that the Commission could be deprived of jurisdiction over a public utility as a result of the application of the Public Utility Holding

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<sup>88</sup> See PJM OATT at Attachment H-8G; E.ON OATT at Attachment O.

<sup>89</sup> EEI OATT at Schedules 7 and 8.

<sup>90</sup> Order No. 642, FERC Stats. & Regs. ¶ 31,111, at pp. 31,914-15.

Company Act of 1935, the Commission has stated that “applicants are still required to address whether the transaction will have any other effect on the Commission’s regulation.”<sup>91</sup> Neither of these concerns is raised by this Transaction, which will have no adverse effect on regulation at either the federal or state level.

The Transaction in fact will result in increased federal regulatory authority over the Applicants and their affiliates. PPL currently enjoys a waiver from certain of the Commission’s regulations under PUHCA 2005 because it qualifies as a single-state holding company.<sup>92</sup> As a result of the Transaction, PPL will no longer qualify as a single-state holding company under PUHCA 2005. Therefore, PPL will be subject to all applicable record retention and reporting requirements of PUHCA 2005. PPL’s service company, PPL Services Corporation, will be subject for the first time to the Uniform System of Accounts For Centralized Service Companies, as well as the applicable record retention and reporting requirements under PUHCA 2005. E.ON US, LG&E, KU, and E.ON U.S. Services, Inc., E.ON US’s service company, are currently subject to all applicable PUHCA 2005 regulations and will remain subject to the same regulations after the Transaction. The public utility subsidiaries of PPL and E.ON US will also remain subject to the Commission’s jurisdiction and regulations under the FPA to the same extent they are currently regulated. Accordingly, the Transaction will have no adverse effect on federal regulation.

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<sup>91</sup> Order No. 669, FERC Stats. & Regs. ¶ 31,200, at P 196 n.140.

<sup>92</sup> 18 C.F.R. § 366.3(c)(1).



In addition, the Transaction will have no adverse effect on state regulation. Following the Transaction, PPL Electric will remain subject to regulation by the Pa. PUC to the same extent it is currently regulated, and LG&E and KU will remain subject to regulation by the KPSC, the VSCC, and the TRA to the same extent they are currently regulated. Moreover, PUHCA 2005 preserves access to holding company books and records by state commissions.<sup>93</sup>

Also, as a condition to the PSA, PPL committed not to assert that the Commission's jurisdiction under PUHCA 2005 preempts the regulatory authority of the KPSC.<sup>94</sup> Another express condition of the PSA requires prior approval of Transaction by the KPSC, the VSCC, and TRA.<sup>95</sup> An application for KPSC approval was filed on May 28, 2010, and action by the KPSC is expected during the third quarter of 2010. An application for VSCC approval was filed on June 15, 2010, and action by the VSCC is expected during the third or fourth quarter of 2010. An application for TRA approval was filed on June 15, 2010, and action by the TRA is expected during the third quarter of 2010. Accordingly, the Transaction will have no adverse effect on state regulation.

**V. THE TRANSACTION WILL NOT RESULT IN PROSCRIBED CROSS-SUBSIDIZATION OR THE PLEDGE OR ENCUMBRANCE OF UTILITY ASSETS**

The Commission requires Section 203 applicants to demonstrate that a proposed transaction will not result in cross-subsidization of a non-utility associate company or the pledge or encumbrance of utility assets for the benefit

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<sup>93</sup> 42 U.S.C. § 16453.

<sup>94</sup> Regulatory Commitments at 3(a).

<sup>95</sup> PSA at § 7.1(b).

of an associate company.<sup>96</sup> Section 203 applicants must provide “assurances, *based on facts and circumstances known to them or that are reasonably foreseeable*, that the proposed transaction will not result in, *at the time of the transaction or into the future*, cross-subsidization.”<sup>97</sup> The Commission’s “concern about cross-subsidization is principally a concern over the effect of a transaction on rates” and “assur[ing] that captive customers are protected from the effects of cross-subsidization.”<sup>98</sup>

In the Supplemental Policy Statement, the Commission explained that Section 203 applicants can “demonstrate that a proposed transaction will not result in inappropriate cross-subsidization . . . either through meeting one of the safe harbor demonstrations [recognized in the Supplemental Policy Statement], proposing its own ring-fencing or other protections to prevent cross-subsidization, or demonstrating that there are no potential cross-subsidy issues associated with the proposed transactions.”<sup>99</sup> One of the three “safe harbor demonstrations” the Commission recognized in the Supplemental Policy Statement is for “transactions that are subject to review by a state commission.”<sup>100</sup> The Commission will “defer to state commissions where the state adopts or has in place ring-fencing measures to protect customers against inappropriate cross-subsidization or the encumbrance of utility assets for the benefit of ‘unregulated’

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<sup>96</sup> Order No. 669, FERC Stats. & Regs. ¶ 31,200, at P 164.

<sup>97</sup> 18 C.F.R. § 33.2(j)(1).

<sup>98</sup> Order No. 669, FERC Stats. & Regs. ¶ 31,200, at P 167.

<sup>99</sup> *FPA Section 203 Supplemental Policy Statement*, 120 FERC ¶ 61,060, at P 23 (2007), *order on clarification and reconsideration*, 122 FERC ¶ 61,157 (2008) (“Supplemental Policy Statement”).

<sup>100</sup> *Id.* at P 18.

affiliates.”<sup>101</sup> To qualify for the state commission review safe harbor, applicants must show that “the proposed transaction complies with specific state regulatory protections against inappropriate cross-subsidization.”<sup>102</sup>

As shown below, the KPSC, the VSCC and the Pa. PUC each has measures, including statutory and regulatory authority and/or commitments by LG&E and KU or PPL Electric, respectively, to protect customers against inappropriate cross-subsidization of a non-utility associate company or the encumbrance of utility assets for the benefit of an associate company.<sup>103</sup> The Transaction therefore falls under the state commission review safe harbor.

The Commission has also stated that even if the state commission review safe harbor for meeting the showing required by FPA Section 203(a)(4) were not to apply, Section 203 applicants could make the required demonstration directly. In assessing whether a transaction poses a risk of improper cross-subsidization or the pledge or encumbrance of utility assets for the benefit of an associate company, the Commission will examine the facts and circumstances of each transaction and determine on a case-by-case basis whether additional protections against inappropriate cross-subsidization or the pledge or encumbrance of utility assets are necessary. Critical to this examination is whether state commissions have authority to impose cross-subsidy protections or

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<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> As discussed *infra* at V.D., KU serves only five residential retail customers in Tennessee, and there are sufficient protections against improper cross-subsidization to protect these five customers.

have in place such protections.<sup>104</sup> Accordingly, the same statutory and regulatory protections and commitments that qualify the Transaction for the state commission review safe harbor also demonstrate directly that the Transaction will not result in improper cross-subsidization or the pledge or encumbrance of utility assets for the benefit of an associate company.

#### **A. Kentucky**

On May 28, 2010, the Applicants filed with the KPSC a joint application for approval of the Transaction.<sup>105</sup> The KPSC will review the Transaction to determine whether it is consistent with the public interest, including whether the Transaction protects against inappropriate cross-subsidization.<sup>106</sup>

In addition to its jurisdiction to review the Transaction, the KPSC has several statutory and regulatory requirements that protect against cross-subsidization, including a general prohibition that a utility may not subsidize the non-regulated activities of an affiliate or of the utility itself.<sup>107</sup> Additionally, KPSC

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<sup>104</sup> See *id.* at P 23 (“The Commission, as a general matter, intends to defer to state-adopted protections unless they can be shown to be inadequate to protect wholesale customers. This deference is appropriate because retail customers typically represent the vast majority of load served by a franchised public utility, and ring-fencing measures typically affect the entire corporation, thereby protecting both retail and wholesale customers.”).

<sup>105</sup> *In the Matter of: The Joint Application of PPL Corporation, E.ON AG, E.ON US Investments Corp., E.ON U.S. LLC, Louisville Gas and Electric Company and Kentucky Utilities Company For Approval of An Acquisition of Ownership and Control of Utilities*, KPSC Case No. 2010-00204 (filed May 28, 2010) (“KPSC Joint Application”).

<sup>106</sup> Ky. Rev. Stat. Ann. §§ 278.020(5) and (6), 278.2201 (2010).

<sup>107</sup> *Id.* § 278.2201. See also *id.* §§ 278.2213(6) and 278.2213(11) (requiring arm’s-length dealing between a utility and nonregulated affiliates); *id.* §§ 278.2201 and 278.2213(1) (requiring separate accounts for regulated utilities and nonregulated affiliates); *id.* § 278.2205 (requiring a regulated utility that engages in nonregulated activity to develop, file, and maintain a cost allocation manual).

approval is required for acquisitions or transfers of utility assets<sup>108</sup> and any issuances of security by a utility that are not “subject to the supervision or control of the federal government.”<sup>109</sup> Kentucky law prohibits a utility from entering into financing arrangements for non-regulated activities that give creditors recourse to the utility’s assets upon default.<sup>110</sup> The KPSC also regulates the pricing and cost allocation of affiliate contracts.<sup>111</sup>

These legal and regulatory protections will be buttressed by specific commitments made to the KPSC.<sup>112</sup> For example, the Applicants commit that they will not cross-subsidize between regulated and non-regulated businesses;<sup>113</sup> will make regular reports and disclosures to the KPSC;<sup>114</sup> and will provide the KPSC with access and the opportunity to audit the books and records of PPL and its subsidiaries that pertain to transactions with LG&E and KU.<sup>115</sup> The PSA’s Regulatory Commitments also contain provisions intended to insulate regulated

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<sup>108</sup> *Id.* § 278.218.

<sup>109</sup> *Id.* § 278.300 (requiring among other things that the issuance be “necessary or appropriate for or consistent with the proper performance by the utility of its service to the public”).

<sup>110</sup> *Id.* § 278.2213(14).

<sup>111</sup> *Id.* § 278.2207 (requiring that affiliate contracts be priced at the tariffed rate, or with nontariffed items, the fully distributed cost); *Id.* §§ 278.2205(2)(e) and 278.2209 (requiring that a cost allocation manual be filed with the KPSC); *Id.* § 278.2211 (granting the KPSC authority to disallow from rates costs of transactions that do not comply with regulations on affiliate transactions).

<sup>112</sup> See Regulatory Commitments”; KPSC Joint Application at pp. 21-24, Exhibit M, Testimony of S. Bradford Rives at pp. 4-5, and Testimony of Lonnie E. Bellar at pp. 2-4.

<sup>113</sup> Regulatory Commitment 3(e).

<sup>114</sup> Regulatory Commitments 3, 4, 6, 17-24, 29, 30, 39, 44.

<sup>115</sup> Regulatory Commitments 2, 3.

utilities from affiliates.<sup>116</sup> To further address cross-subsidization concerns, the Regulatory Commitments prohibit E.ON US, LG&E or KU from incurring additional indebtedness, issuing additional securities, or pledging assets to finance the Transaction.<sup>117</sup>

## **B. Virginia**

On June 15, 2010, the Applicants filed with the VSCC a joint application for approval of the Transaction.<sup>118</sup> The VSCC will review the Transaction to determine whether it is consistent with the public interest, including whether the Transaction protects against inappropriate cross-subsidization.<sup>119</sup> In the VSCC Joint Petition, the Applicants demonstrate that the Transaction will not result in inappropriate cross-subsidization.<sup>120</sup>

Virginia also has a series of regulatory protections to prevent cross-subsidization. For example, the VSCC must approve the transfer of utility assets,<sup>121</sup> the issuance of securities by a regulated public utility,<sup>122</sup> any loan or

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<sup>116</sup> Regulatory Commitments 50 (prohibiting LG&E and KU from holding PPL's diversified holdings or investments) and 8(g) (requiring that LG&E and KU maintain a separate corporate credit rating).

<sup>117</sup> Regulatory Commitment 8. See also Regulatory Commitment 17, 20, 23.

<sup>118</sup> *The Joint Petition of PPL Corporation, E.ON AG, E.ON US Investments Corp., E.ON US LLC and Kentucky Utilities d/b/a Old Dominion Power Company for Approval of an Acquisition of Control of Utilities*, VSCC Case No. PUE-2010-00060 (filed June 15, 2010) ("VSCC Joint Petition").

<sup>119</sup> See *infra* notes 121-124.

<sup>120</sup> VSCC Joint Petition at pp. 15-18.

<sup>121</sup> Va. Code Ann. § 56-89 (2009). See also *id.* § 90 (requiring that transfers not impair or jeopardize adequate service to the public at just and reasonable rates).

<sup>122</sup> *Id.* § 56-59. See also *id.* § 56-58 (limiting the purposes for which a public utility may issue stocks to (1) acquisition of property, (2) construction, completion, extension, or improvement of its facilities, (3) improvement or maintenance of its service, (4) discharge or lawful refunding of its obligations, and (5) reimbursement of moneys actually expended from income).

assumption of an obligation by a regulated utility for an affiliated interest,<sup>123</sup> and contracts between a regulated public utility and any affiliated interest.<sup>124</sup>

### **C. Pennsylvania**

Pennsylvania law contains specific provisions to protect against cross-subsidization. For example, Pa. PUC approval is required before a public utility or an affiliated interest of a public utility acquires or transfers “property used or useful in the public service.”<sup>125</sup> Also, before a public utility may issue or assume securities, the public utility must file with the Pa. PUC and receive from it a notice of registration.<sup>126</sup> The Pa. PUC will grant the registration of the issuance or assumption of securities if the Pa. PUC finds that the issuance or assumption is “necessary or proper for the present and probable future capital needs of the public utility.”<sup>127</sup> Lastly, the Pa. PUC must approve contracts for goods and services between a public utility and any affiliated interest.<sup>128</sup> The Pa. PUC will grant approval of affiliated interest agreements only if it “clearly appear[s] and [is] established upon investigation that [the affiliated interest agreement] is

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<sup>123</sup> *Id.* § 56-82 (“No public service company shall henceforth make, extend or renew any loan of money to any affiliated interest or assume, extend or renew any obligation or liability whatsoever of any affiliated interest, whether as guarantor, endorser, surety or otherwise, unless the Commission shall first have approved such loan or assumption, or the extension or renewal of such loan, obligation, or liability, as being not inconsistent with the public interest, and then only upon such terms and conditions as may be set forth in the order of the Commission approving such transaction.”).

<sup>124</sup> *Id.* § 56-77. *See also id.* § 56-78 (granting the VSCC authority to exclude payment or compensation to an affiliated interest from a regulated public utility’s accounts if the payment of compensation is not consistent with the public interest).

<sup>125</sup> 66 Pa. Cons. Stat. Ann. § 1102(a)(3) (2009).

<sup>126</sup> *Id.* § 1901.

<sup>127</sup> *Id.* § 1903.

<sup>128</sup> *Id.* § 2102(a).

reasonable and consistent with the public interest.”<sup>129</sup> The Pa. PUC will not approve affiliated interest agreements without sufficient proof of the costs of providing goods or services to the public utility incurred by the affiliated interest.<sup>130</sup> Additionally, the Pa. PUC maintains supervision and jurisdiction over affiliated interest agreements<sup>131</sup> and will disallow contract prices found to be excessive from being included in rates.<sup>132</sup> PPL Electric currently has in place a Pa. PUC-approved affiliated interest agreement covering non-power transactions between itself and other PPL affiliates requiring that they be priced at cost.

In addition to the protections described above, PPL Electric’s Articles of Incorporation and Bylaws contain several provisions that protect against cross-subsidization.<sup>133</sup> For example, pursuant to its Articles of Incorporation, PPL Electric must maintain one independent director on its own Board of Directors whose consent is required before PPL Electric may file a petition to commence a voluntary bankruptcy case.<sup>134</sup> PPL Electric’s Bylaws also contain a series of provisions to protect against cross-subsidization, including, but not limited to, provisions stating that PPL Electric shall: (a) restrict its business activities, whether directly or indirectly through subsidiaries, to electric transmission and

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<sup>129</sup> *Id.* § 2102(b).

<sup>130</sup> *Id.*

<sup>131</sup> *Id.* § 2103.

<sup>132</sup> *Id.* § 2102(c).

<sup>133</sup> PPL Electric voluntarily adopted these provisions in its Bylaws and Articles of Incorporation in connection with an earlier debt financing unrelated to the Transaction.

<sup>134</sup> Amended and Restated Articles of Incorporation, PPL Electric Utilities Corporation, Article X (requiring that the PPL Electric board include a director that has had no affiliation with PPL as an employee, stockholder, or relative of an employee or stockholder within the previous five years).



distribution businesses and those business activities related to or arising from those businesses;<sup>135</sup> (b) maintain its own separate accounts, books, and records and not commingle funds, assets, books, or records with PPL or its affiliates;<sup>136</sup> (c) not hold itself out as liable for the debts of PPL or its affiliates;<sup>137</sup> (d) not pledge its assets for the benefit of PPL or its affiliates with the exception of guaranteeing the debts of its own direct or indirect subsidiaries;<sup>138</sup> and (e) maintain an arm's-length relationship with PPL and its affiliates. To further protect against cross-subsidization, PPL Electric commits to retain the cited provisions of its Articles of Incorporation and Bylaws that protect against cross-subsidization for five years following the date of consummation of the Transaction.

#### **D. Tennessee**

KU only serves five residential customers in Tennessee, accounting for annual revenue of less than \$5,000. Between the TRA's review of the Transaction, its continuing oversight of KU and the commitments made to protect KU and its customers, generally (which are described in this Section V), these five customers will be protected against improper cross-subsidization and the pledge or encumbrance of utility assets for the benefit of an associate company.<sup>139</sup>

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<sup>135</sup> Bylaws of PPL Electric Utilities Corporation, Section 9.01.

<sup>136</sup> *Id.* at Section 9.02(a) and (d).

<sup>137</sup> *Id.* at Section 9.02(b).

<sup>138</sup> *Id.* at Section 9.02(g).

<sup>139</sup> *Joint Petition of PPL Corporation, E.ON AG, E.ON US Investments Corp., E.ON U.S. LLC, and Kentucky Utilities Company for Approval of a Transfer of Control of Kentucky Utilities Company*, TRA Docket No. 10-00118 (filed June 15, 2010).

## **E. Additional Protections**

When a public utility is acquired by another company, the Commission has recognized that its ability to adequately protect public utility ratepayers against inappropriate cross-subsidization may be impaired unless the Commission has access to the parent company's books and records. Section 301(c) of the FPA gives the Commission authority to examine books and records of any person who controls, directly or indirectly, a jurisdictional public utility insofar as the books and records relate to transactions with or the business of such public utility.<sup>140</sup> PPL commits to make available upon request by the Commission all publicly available financial information and related books and records. Moreover, PPL commits to make available upon request any information necessary to support the pricing for the sale of goods and services between or among LG&E, KU, and PPL or any of its subsidiaries or affiliates.

In addition, as a result of the Transaction, PPL will no longer qualify as a single-state holding company under PUHCA 2005. Therefore, PPL will be subject to all applicable record retention and reporting requirements of PUHCA 2005, and PPL Services Corporation will be subject for the first time to the Uniform System of Accounts for Centralized Service Companies as well as the applicable record retention and reporting requirements under PUHCA 2005. The Commission will therefore have access to the books, accounts, memoranda, and other records of PPL and its associate companies to the extent necessary or appropriate for the protection of utility customers with respect to jurisdictional

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<sup>140</sup> 16 U.S.C. § 825(c).

rates.<sup>141</sup> In addition, PPL Electric, as a franchised public utility that owns jurisdictional transmission facilities, will be required to comply with the Commission's regulations that it only purchase or receive non-power goods or services from a centralized service company at cost,<sup>142</sup> as LG&E and KU are required to do now.

The Applicants further note that, on May 21, 2010, PPL, E.ON US, and their respective affiliates submitted a letter informing the Commission that, as of the date of the announcement of the Transaction, they are treating each other as affiliates for purposes of the market-based rate affiliate restrictions and Standards of Conduct.<sup>143</sup> Moreover, the Applicants' public utility affiliates will continue to comply with the Commission's applicable market-based affiliate restrictions after the Transaction is complete.

#### **F. Detailed Showings**

The Applicants also submit that they comply with Section 33.2(j) of the Commission's regulations.<sup>144</sup> In Order No. 669, as modified by Order Nos. 669-A and 669-B, the Commission adopted regulations that require: (i) the "[d]isclosure of existing pledges and/or encumbrances of utility assets" and (ii) certain "detailed showing[s]" concerning the proposed transaction. As regards the latter, the Commission requires:

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<sup>141</sup> See 18 C.F.R. Part 366.

<sup>142</sup> See *id.* § 35.44(b)(3).

<sup>143</sup> *PPL Elec. Util. Corp. et al.*, Notice of Proposed Acquisition of E.ON U.S. LLC by PPL Corporation as it Relates to the Commission's Affiliate Restrictions, Docket Nos. ER00-1712-000, *et al.* (filed May 21, 2010).

<sup>144</sup> 18 C.F.R. § 33.2(j). The detailed showings required by 18 C.F.R. § 33.2(j) are also included in Exhibit M.

(ii) A detailed showing that the transaction will not result in:

(A) Any transfer of facilities between a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, and an associate company;

(B) Any new issuance of securities by a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, for the benefit of an associate company;

(C) Any new pledge or encumbrance of assets of a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, for the benefit of an associate company; or

(D) Any new affiliate contract between a non-utility associate company and a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, other than non-power goods and services agreements subject to review under sections 205 and 206 of the Federal Power Act....<sup>145</sup>

The Transaction will not result in any proscribed cross-subsidization or the pledge or encumbrance of utility assets for the benefit of an associate company because:

- First, the Transaction will not result in any transfer of jurisdictional assets between affiliated entities.
- Second, the Transaction will involve no additional indebtedness by LG&E or KU. Although LG&E and KU will each issue certain debt

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<sup>145</sup> 18 C.F.R. § 33.2(j)(1)(ii). Additionally, if the Applicants are not able to provide assurance that the proposed transaction will not result in cross-subsidization of a non-utility associated company or pledge or encumbrance of utility assets for the benefit of an associate company through the requirements set forth in § 33.2(j)(1) then the Applicants are required to provide “an explanation of how such cross-subsidization, pledge, or encumbrance will be consistent with the public interest.” 18 C.F.R. § 33.2(j)(2).

securities as a result of the Transaction, doing so will not benefit any associate company of LG&E or KU. As explained fully in Part III of this Application, LG&E and KU will, at closing, each be repaying certain existing debt to their (then former) affiliate Fidelia and replacing this debt with unsecured debt to a PPL affiliate. On or after closing, LG&E and KU each intends to refinance its debt with traditional utility long-term, secured first mortgage bonds. Although any unsecured debt issued would be held by an associate company of LG&E and KU, it will not be issued “for the benefit of such associate company.” It would simply replace existing LG&E and KU financing. Further, the Applicants have committed that neither LG&E nor KU will incur additional indebtedness, issue any additional securities, or pledge any assets of LG&E or KU to finance any part of the purchase price paid by PPL for the acquisition of E.ON US.<sup>146</sup>

- Third, the Transaction will not result in any new pledge or encumbrance of utility assets. Although, as noted above, each of LG&E and KU will issue certain debt as a result of the Transaction, such issuance will only be for the purpose of refinancing existing debt and thus should not be considered by the Commission to be a “*new* pledge or encumbrance.” Further, the first mortgage bonds

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<sup>146</sup> The Applicants have included *pro forma* accounting entries as Appendix 4; however, PPL, E.ON US, LG&E, and KU committed to the KPSC that the premium paid by PPL for E.ON US’s equity interest and any other associated costs would not be “pushed down” to LG&E and KU. Regulatory Commitment 8(c).

that may ultimately replace the debt presently held by Fidelia will be for the benefit of each of LG&E and KU and not for the benefit of any associate company. Nor will there be any pledge or encumbrance of PPL Electric's assets for the benefit of an associate company as a result of the Transaction.

- Fourth, the replacement of the existing Fidelia debt with unsecured debt to a PPL affiliate and, subsequently, the issuance of LG&E and KU first mortgage bonds, are subject to approval by the KPSC,<sup>147</sup> VSCC,<sup>148</sup> and TRA.<sup>149</sup>
- Fifth, other than transactions involving centralized service companies subject to regulation under PUHCA 2005, the Transaction will not result in any new affiliate contract between PPL Electric, LG&E, KU, and any associate company. Both E.ON US and PPL will retain their respective existing centralized service companies which will continue to provide the same range of services as they provided before the Transaction. The only

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<sup>147</sup> *The Application of Louisville Gas and Electric Company for an Order Authorizing the Restructure and Refinancing of Unsecured Debt and the Assumption of Obligations and for Amendment of Existing Authority*, KPSC Case No. 2010-00205 (filed May 28, 2010); *The Application of Kentucky Utilities Company for an Order Authorizing the Restructure and Refinancing of Unsecured Debt and the Assumption of Obligations and for Amendment of Existing Authority*, KPSC Case No. 2010-00206 (filed May 28, 2010).

<sup>148</sup> *Application of Kentucky Utilities Company d/b/a Old Dominion Power Company for Authority under Chapter 3 of Title 56 of the Code of Virginia to Restructure and Refinance Unsecured Debt, to Assume Obligations, and for Amendment of Existing Authority*, VSCC Case No. PUE-2010-00061 (filed June 15, 1020).

<sup>149</sup> *Petition of Kentucky Utilities Company for an Order Authorizing the Restructure and Refinancing of Unsecured Debt, the Assumption of Obligations and for Amendment of Existing Financing Authority*, TRA Docket No. 100119 (Filed June 15, 2010).

significant change will be that PPL's centralized service company will no longer qualify for a waiver as part of a single-state holding company system and PPL Services Corporation must keep its books and records according to the Commission's Uniform System of Accounts for Centralized Service Companies.<sup>150</sup>

## **VI. INFORMATION REQUIRED UNDER PART 33**

In compliance with Section 33.2 of the Commission's regulations, 18 C.F.R. § 33.2, the Applicants submit the following information.

### **A. Section 33.2(a) – Exact Name of Applicants and Their Principal Business Addresses**

The exact name of PPL is PPL Corporation, and its principal place of business is Two North Ninth Street, Allentown, Pennsylvania 18101.

The exact name of E.ON US is E.ON U.S. LLC, and its principal place of business is 220 West Main Street, Louisville, Kentucky 40202.

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<sup>150</sup> 18 C.F.R. Part 367. See 18 C.F.R. § 366.22(b).

**B. Section 33.2(b) – The Names and Addresses of Persons Authorized to Receive Notices and Communications Regarding the Application**

The Applicants request that all notices, correspondence, and other communications concerning this Application be directed to the following persons.

For PPL Corporation

Robert J. Grey  
Jesse A. Dillon  
PPL Services Corporation  
Two North Ninth Street  
Allentown, PA 18101  
Tel: (610) 774-5013  
Fax: (610) 774-6726  
rjgrey@pplweb.com  
jadillon@pplweb.com

Donald A. Kaplan  
Andrew B. Young  
K&L Gates LLP  
1601 K Street, NW  
Washington, DC 20006  
Tel: (202) 778-9000  
Fax: (202) 778-9100  
don.kaplan@klgates.com  
andrew.young@klgates.com

For E.ON U.S. LLC

John R. McCall  
Jennifer Keisling  
E.ON U.S. LLC  
220 West Main Street  
Louisville, KY 40202  
Tel: (502) 627-4303  
Fax: (502) 627-3367  
john.mccall@eon-us.com  
jennifer.keisling@eon-us.com

Kevin C. Fitzgerald  
Jeffrey M. Jakubiak  
TROUTMAN SANDERS LLP  
401 9th Street, NW, Suite 1000  
Washington, DC 20004  
Tel: (202) 274-2950  
Fax: (202) 274-2994  
kevin.fitzgerald@troutmansanders.com  
jeffrey.jakubiak@troutmansanders.com

The Applicants respectfully request waiver of the Commission's regulations so as to permit more than two persons to be designated on the official service list.

**C. Section 33.2(c) – Description of Applicants (Exhibits A-F)**

**1. Business Activities (Exhibit A)**

A description of the Applicants and their business activities is included in Part II and Exhibit B of this Application. Accordingly, the Applicants respectfully request waiver of the requirement to submit a separate Exhibit A.



## **2. Energy Subsidiaries and Affiliates (Exhibit B)**

A description of the Applicants' jurisdictional subsidiaries is included in Part II and in Exhibit B of this Application, in the format set forth in Appendix B to Order No. 697.<sup>151</sup> To the extent that Exhibit B does not conform with the requirements of Section 33.2(c)(2) of the Commission's regulations, the Applicants respectfully request waiver of the need to provide any further information regarding additional affiliates as such information is not relevant to the Transaction or to this Application and would be unduly burdensome to compile. More specifically, such other affiliates are either not involved in the Transaction (in the case of the E.ON C&R) or do not engage in Commission-jurisdictional activities under the FPA and will have no role in the Transaction, financially or otherwise.

## **3. Organizational Charts (Exhibit C)**

Organizational charts depicting the Applicants' corporate structures before and after consummation of the Transaction are attached hereto in Exhibit C.

## **4. Joint Ventures, Strategic Alliances, Tolling Arrangements or Other Business Arrangements (Exhibit D)**

The Transaction will not affect any joint ventures, strategic alliances, or other business arrangements of the Applicants separate from the Transaction.

All contracts, joint ventures or strategic alliances entered into by the Applicants

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<sup>151</sup> *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697, 72 Fed. Reg. 39,904 (July 20, 2007), FERC Stats. & Regs. ¶¶ 31,252, *order clarifying Final Rule*, 121 FERC ¶¶ 61,260 (2007), *order on reh'g*, Order No. 697-A, 73 Fed. Reg. 25,832 (May 7, 2008), FERC Stats. & Regs. ¶¶ 31,268 (2008); *order on clarification*, 124 FERC ¶¶ 61,055 (2008), *order on reh'g and clarification*, Order No. 697-B, FERC Stats. & Regs. ¶¶ 31,285 (2008), *order on reh'g*, Order No. 697-C, FERC Stats. & Regs. ¶¶ 31,291 (2009), *order on reh'g*, Order No. 697-D, FERC Stats. & Regs. ¶¶ 31,305 (2010).

and/or their subsidiaries will be honored after consummation of the Transaction, in accordance with their terms. Therefore, the Applicants respectfully request waiver of the requirement to submit a separate Exhibit D.

**5. Common Officers or Directors (Exhibit E)**

PPL and its subsidiaries have no officers or directors in common with E.ON US and its subsidiaries. Accordingly, the Applicants respectfully request waiver of the requirement to submit a separate Exhibit E.

**6. Wholesale Power Sales Customers and Unbundled Transmission Services Customers (Exhibit F)**

A list of the current Commission-jurisdictional wholesale power sales customers served under cost-based rates and unbundled transmission services customers of LG&E, KU, and KU's subsidiaries is attached as Exhibit F.

The Applicants respectfully request a waiver of the requirement of Section 33.2(c)(6) of the Commission's regulations to submit Exhibit F for wholesale power sales customers of E.ON US's and PPL's public utility subsidiaries served under market-based rates.<sup>152</sup> Information regarding wholesale power sales by E.ON US's and PPL's public utility subsidiaries at market-based rates is filed with the Commission in the electric quarterly reports submitted by the Applicants in accordance with the Commission's regulations.

Although PPL Electric owns transmission facilities, transmission service over these facilities is provided under the PJM OATT. Moreover, the Transaction will not affect the rates charged for transmission service over PPL's transmission facilities, which are determined pursuant to Commission-approved formula rates

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<sup>152</sup> All of the current wholesale power customers of PPL's public utility subsidiaries are served under market-based rates.

that will not change as a result of the Transaction pursuant to the terms of the hold harmless commitment detailed above.<sup>153</sup> Thus, the Applicants request waiver of the requirement for PPL to provide information regarding unbundled transmission customers using PPL's transmission facilities under the PJM OATT.<sup>154</sup>

**D. Section 33.2(d) – Jurisdictional Facilities Owned, Operated, or Controlled by Applicants or Their Affiliates (Exhibit G)**

Enclosed as Exhibit G are charts describing the electric transmission facilities owned, operated, or controlled by PPL Electric, LG&E, KU, and EEInc. Other jurisdictional assets owned by the Applicants or their subsidiaries are described in Part II above, Exhibit B, and Exhibit F. Applicants respectfully request waiver of any need to identify non-FPA assets subject to the Commission's jurisdiction, as such assets (namely, the natural gas assets of LG&E and KU) are described in Part II, above, and Exhibit B-2.

**E. Section 33.2(e) – Jurisdictional Facilities and Securities Associated with or Affected by the Transaction, Consideration for the Transaction (Exhibit H)**

The jurisdictional facilities and securities associated with or affected by the Transaction are described in Parts II and III above, as well as in Exhibit G. Consideration for the Transaction is described in the PSA included herewith as

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<sup>153</sup> Transmission over the facilities of EEInc, which is controlled by Ameren Corporation, is also provided under an OATT.

<sup>154</sup> Although the Applicants are not seeking a waiver of the requirement to submit Exhibit F for LG&E and KU, as noted above in Section II.B.1, transmission service over LG&E/KU's facilities is provided under a joint OATT administered by SPP, the rates for which are determined pursuant to a Commission-approved formula rate that will not change as a result of the Transaction.

Exhibit I. Accordingly, the Applicants respectfully request waiver of the requirement to submit a separate Exhibit H.

**F. Section 33.2(f) – Contracts Related to the Transaction (Exhibit I)**

The PSA is attached hereto at Exhibit I. As explained in Part VII below, the Applicants request privileged treatment for certain information contained in the PSA.

**G. Section 33.2(g) – Facts Relied Upon to Show that the Transaction is Consistent with the Public Interest (Exhibit J)**

A discussion of the facts relied upon to show that the Transaction is consistent with the public interest is provided above in Parts IV and V. In view of the foregoing, the Applicants respectfully request waiver of the requirement to submit a separate Exhibit J.

**H. Section 33.2(h) – Key Map Showing Properties of Each Party to the Transaction (Exhibit K)**

Maps showing in different colors the primary jurisdictional properties of PPL Electric, LG&E and KU are attached hereto in Exhibit K. The Applicants respectfully request waiver of the need to identify other properties on Exhibit K as such information would be burdensome to compile and is not relevant to this Application.

**I. Section 33.2(i) – Other Regulatory Approvals (Exhibit L)**

In addition to approval of the Commission, consummation of the Transaction is conditioned on approval of the KPSC, VSCC, and TRA. An application for KPSC approval was filed on May 28, 2010, and action by the KPSC is expected during the third quarter of 2010. An application for VSCC approval was filed on June 15, 2010, and action by the VSCC is expected during

the third or fourth quarter of 2010. An application for TRA approval was filed on June 15, 2010, and action by the TRA is expected during the third quarter of 2010.

In addition, notification of the proposed Transaction is required to be submitted to the DOJ and FTC in accordance with the Hart-Scott-Rodino Antitrust Improvements Act of 1976.<sup>155</sup> The Applicants and/or their affiliates anticipate making that submission shortly. Further, LG&E, KU and LEM require the approval of the Federal Communications Commission (“FCC”) for the indirect transfer of certain FCC licenses held by these entities. Applications for these transfers will be filed shortly and action on these applications is expected during the third quarter of 2010.

In view of the foregoing information, the Applicants respectfully request waiver of the requirement to submit a separate Exhibit L.

**J. Section 33.2(j) – Cross-Subsidizations, Pledges or Encumbrances of Utility Assets (Exhibit M)**

The Applicants have attached as Exhibit M the detailed showings required by 18 C.F.R. 33.2(j) and a list of LG&E’s and KU’s existing pledges and encumbrances. A discussion of cross-subsidization and related issues is also set forth above in Part V.

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<sup>155</sup> 15 U.S.C. § 18a.

**K. Section 33.5 – Proposed Accounting Entries**

*Pro forma* accounting entries under the Commission’s Uniform System of Accounts<sup>156</sup> proposed to be used in connection with the Transaction are set forth in Appendix 4.

**L. Section 33.7 – Verifications**

Verifications executed by the Applicants’ respective authorized representatives are provided at Appendix 1 hereto.

**VII. REQUEST FOR PRIVILEGED TREATMENT**

The Applicants respectfully request privileged treatment, in accordance with 18 C.F.R. § 388.112, for portions of the Company Disclosure Schedule contained in the PSA. The complete, privileged version of the Company Disclosure Schedule is attached hereto as Confidential Exhibit I. The Applicants also request privileged treatment for certain confidential workpapers to the Kalt-Cavicchi Affidavit, submitted in connection with the Application and designated as Confidential Appendix 3. The Applicants consider the redacted information in the Company Disclosure Schedule and certain Kalt-Cavicchi Affidavit workpapers to be of a sensitive commercial nature or covered by a confidentiality agreement restricting their public disclosure, and in the case of the Company Disclosure Schedule, the product of arm’s-length commercial negotiations. Accordingly, public disclosure could severely hamper the ability of the parties to the Transaction to engage in any future transactions of a similar nature with other parties. As required by 18 C.F.R. § 33.9, the Applicants have included in Appendix 2 hereto a proposed protective order that includes a restriction on the

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<sup>156</sup> 18 C.F.R. Part 101.

ability of competitive duty personnel to view the confidential material. The Applicants ask that these privileged materials be placed in the Commission's non-public files.

### **VIII. CONCLUSION**

WHEREFORE, for the foregoing reasons, the Applicants respectfully request that the Commission approve the Transaction under FPA Section 203 no later than November 18, 2010, and without modification, condition, or a trial-type hearing.

Respectfully submitted,

Robert J. Grey  
Jesse A. Dillon  
PPL Services Corporation  
Two North Ninth Street  
Allentown, PA 18101

Donald A. Kaplan  
Andrew B. Young  
K&L Gates LLP  
1601 K Street, NW  
Washington, DC 20006

*Attorneys for PPL Corporation*

By /s/ Donald A. Kaplan

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401 9th Street, NW, Suite 1000  
Washington, DC 20004

*Attorneys for E.ON U.S. LLC*

By /s/ Jeffrey M. Jakubiak

Dated: June 28, 2010

**APPENDIX 1**

**VERIFICATIONS**



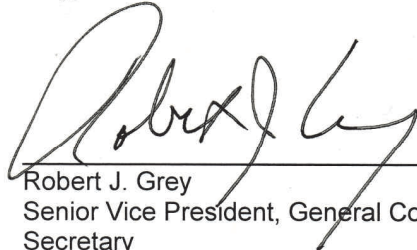
UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

VERIFICATION PURSUANT TO 18 C.F.R. § 33.7

COMMONWEALTH OF PENNSYLVANIA )  
  )  
COUNTY OF LEHIGH )

NOW, BEFORE ME, the undersigned authority, personally came and appeared,  
Robert J. Grey, who first being duly sworn by me, did depose and say:

That he is the Senior Vice President, General Counsel and Secretary of PPL  
Corporation and that he has read the foregoing Application and attached Exhibits and  
knows the contents thereof, and that the same are true and correct to the best of his  
knowledge, information and belief.

  
\_\_\_\_\_  
Robert J. Grey  
Senior Vice President, General Counsel and  
Secretary  
PPL Corporation

Subscribed and sworn to me this 25 day of June 2010.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 9/29/2011

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
DIANE M. KOCH, NOTARY PUBLIC  
CITY OF ALLENTOWN, LEHIGH COUNTY  
MY COMMISSION EXPIRES SEPT. 29, 2011

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

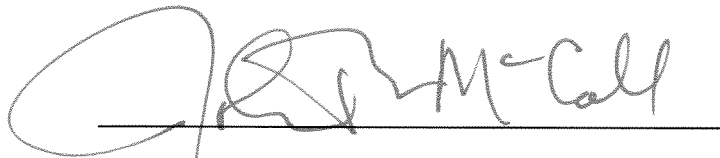
VERIFICATION PURSUANT TO 18 C.F.R. § 33.7

COMMONWEALTH OF KENTUCKY )

COUNTY OF Jefferson )

NOW, BEFORE ME, the undersigned authority, personally came and appeared,  
John R. McCall, who first being duly sworn by me, did depose and say:

That he is the Executive Vice President, General Counsel, and Corporate  
Secretary of E.ON U.S. LLC and that he has read the foregoing Application and  
attached Exhibits and knows the contents thereof, and that the same are true and  
correct to the best of his/her knowledge, information and belief.

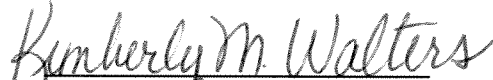


John R. McCall

Executive Vice President, General Counsel,  
and Corporate Secretary

E.ON U.S. LLC

Subscribed and sworn to me this 25 day of June 2010.

  
Notary Public

My Commission Expires: 9/11/2012

**APPENDIX 2**

**FORM OF PROTECTIVE ORDER**

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>PPL Corporation</b>	)	
	)	
<b>E.ON U.S. LLC</b>	)	<b>Docket No. EC10-___-000</b>
	)	

**Protective Order**

(Issued \_\_\_\_\_, 2010)

1. This Protective Order shall govern the use of all Protected Materials produced by, or on behalf of, any Participant. Notwithstanding any order terminating this proceeding, this Protective Order shall remain in effect until specifically modified or terminated by the Presiding Administrative Law Judge (“Presiding Judge”) or the Federal Energy Regulatory Commission (“Commission”).

2. This Protective Order applies to the following two categories of materials: (A) A Participant may designate as protected those materials which customarily are treated by that Participant as sensitive or proprietary, which are not available to the public, and which, if disclosed freely, would subject that Participant or its customers to risk of competitive disadvantage or other business injury; and (B) A Participant shall designate as protected those materials which contain critical energy infrastructure information, as defined in 18 C.F.R. § 388.113(c)(1) (“Critical Energy Infrastructure Information”).

3. Definitions -- For purposes of this Order:

(a) The term “Participant” shall mean a Participant as defined in 18 C.F.R. § 385.102(b).

(b) (1) The term “Protected Materials” means (A) materials (including depositions) provided by a Participant in response to discovery requests and designated by such Participant as protected; (B) any information contained in or obtained from such designated materials; (C) any other materials which are made subject to this Protective Order by the Presiding Judge, by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Protected Materials; and (E) copies of Protected Materials. The Participant producing the Protected Materials shall physically mark them on each page as “PROTECTED MATERIALS” or with words of similar import as long as the term “Protected Materials” is included in that designation to indicate that they are Protected Materials. If the Protected Materials contain Critical Energy Infrastructure Information, the Participant producing such information shall additionally mark on each page containing such information the words “Contains Critical Energy Infrastructure Information - Do Not Release.”

information shall additionally mark on each page containing such information the words “Contains Critical Energy Infrastructure Information - Do Not Release.”

(2) The term “Notes of Protected Materials” means memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses materials described in Paragraph 5. Notes of Protected Materials are subject to the same restrictions provided in this order for Protected Materials except as specifically provided in this order.

(3) Protected Materials shall not include (A) any information or document contained in the files of the Commission, or any other federal or state agency, or any federal or state court, unless the information or document has been determined to be protected by such agency or court, or (B) information that is public knowledge, or which becomes public knowledge, other than through disclosure in violation of this Protective Order. Protected Materials do include any information or document contained in the files of the Commission that has been designated as Critical Energy Infrastructure Information.

(c) The term “Non-Disclosure Certificate” shall mean the certificate annexed hereto by which Participants seeking access to Protected Materials shall certify their understanding that such access to Protected Materials is provided pursuant to the terms and restrictions of this Protective Order, and that such Participants have read the Protective Order and agree to be bound by it. No Reviewing Representative shall receive any Protected Materials until an executed Non-Disclosure Certificate for that Reviewing Representative has been received and not objected to by the disclosing Participant pursuant to paragraph 3(e). All Non-Disclosure Certificates shall be served on all parties on the official service list maintained by the Secretary in this proceeding.

(d) The term “Reviewing Representative” shall mean a person who has signed a Non-Disclosure Certificate and who is:

- (1) Commission Trial Staff designated as such in this proceeding;
- (2) an attorney who has made an appearance in this proceeding for a Participant;
- (3) attorneys, paralegals, and other employees associated for purposes of this case with an attorney described in Subparagraph (2);
- (4) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for or testifying in this proceeding;
- (5) a person designated as a Reviewing Representative by order of the Presiding Judge or the Commission, or as agreed to by the disclosing Participant; or
- (6) employees or other representatives of Participants appearing in this proceeding with significant responsibility for this docket.

(e) Solely with respect to Protected Materials that have been marked as containing material not available to Competitive Duty Personnel (and information derived therefrom), a Reviewing Representative may not include any person whose duties include (i) the marketing or sale of electric power at wholesale, (ii) the purchase or sale of electric power at wholesale, (iii) the direct supervision of any employee with such responsibilities, or (iv) the provision of electricity marketing consulting services to entities engaged in the sale or purchase of electric power at wholesale (collectively, “Competitive Duties,” and persons engaged in such Competitive Duties, “Competitive Duty Personnel”). If any person who has been a Reviewing Representative subsequently is assigned to perform any Competitive Duties, or if previously available Protected Materials are changed to Protected Materials that have been marked as containing material not available to Competitive Duty Personnel (and any information derived therefrom), with the exception of the Reviewing Representative’s own data, such person shall have no access to Protected Material marked as containing material not available to competitive duty personnel (or information derived therefrom) and shall dispose of such Protected Material, and shall continue to comply with the requirements set forth in the Non-Disclosure Certificate and this Protective Order with respect to any Protected Materials to which such person previously had access. Notwithstanding the foregoing, a person engaged in Competitive Duties may be a Reviewing Representative for Protected Materials marked as not available to Competitive Duty Personnel if: (i) the Participant who employs or has retained that person certifies in writing to the party producing the Protected Material that its ability to effectively participate in this proceeding would be prejudiced if it was unable to rely on the assistance of the particular Reviewing Representative; (ii) the Participant claiming such prejudice must identify by name and job title the particular Reviewing Representative required; (iii) the Participant claiming such prejudice must acknowledge in writing to the party producing the Protected Material that access to that material shall be restricted only to purposes of the litigation of this proceeding, absent prior written consent of the party producing the material or authorization of the Commission or the Presiding Judge, with opportunity for the Producing Party to seek review of such decision as provided in this order; (iv) the Participant acknowledges that any other use shall constitute a violation of an order of the Commission; and, (v) the person engaged in Competitive Duties acting as a Reviewing Representative has provided a declaration or affidavit acknowledging his or her familiarity with the contents of this order and the particular restrictions set forth in this paragraph. Once materials are clearly and correctly labeled, compliance shall be the responsibility of the Reviewing Party. Materials marked as Protected Materials that have been marked as containing material not available to Competitive Duty Personnel (and any information derived therefrom) shall be returned or destroyed at the conclusion of proceedings as otherwise provided for herein.

The disclosing Participant may challenge a person’s designation as Competitive Duty Personnel entitled to Protected Materials marked as “not available to

Competitive Duty Personnel.” Any such challenge must be submitted to the Presiding Administrative Law Judge or Commission for resolution within five (5) days of the disclosing Participant’s receipt of the signed Non-Disclosure Certificate for Competitive Duty Personnel.

4. Protected Materials shall be made available under the terms of this Protective Order only to Participants and only through their Reviewing Representatives as provided in Paragraphs 7-9.

5. Protected Materials shall remain available to Participants until the later of the date that an order terminating this proceeding becomes no longer subject to judicial review, or the date that any other Commission proceeding relating to the Protected Material is concluded and no longer subject to judicial review. If requested to do so in writing after that date, the Participants shall, within fifteen days of such request, return the Protected Materials (excluding Notes of Protected Materials) to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts and exhibits in this proceeding that contain Protected Materials, and Notes of Protected Material may be retained, if they are maintained in accordance with Paragraph 6, below. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Protected Materials and all Notes of Protected Materials have been returned or have been destroyed or will be maintained in accordance with Paragraph 6. To the extent Protected Materials are not returned or destroyed, they shall remain subject to the Protective Order.

6. All Protected Materials shall be maintained by the Participant in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8-9. The Secretary shall place any Protected Materials filed with the Commission in a non-public file. By placing such documents in a non-public file, the Commission is not making a determination of any claim of privilege. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities. For documents submitted to Commission Trial Staff (“Staff”), Staff shall follow the notification procedures of 18 C.F.R. § 388.112 before making public any Protected Materials.

7. Protected Materials shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the certificate executed pursuant to Paragraph 9. Protected Materials shall not be used except as necessary for the conduct of this proceeding, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in the conduct of this proceeding and who needs to know the information in order to carry out that person’s responsibilities in this proceeding. Reviewing Representatives may make copies of Protected Materials, but such copies become Protected Materials. Reviewing Representatives may make notes of Protected Materials, which shall be treated as Notes of Protected Materials if they disclose the contents of Protected Materials.

8. A Reviewing Representative may not use information contained in any Protected Materials obtained through this proceeding to give any Participant or any competitor of any Participant a commercial advantage. In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3(d) above, the Participant shall seek agreement from the Participant providing the Protected Materials. If an agreement is reached that person shall be a Reviewing Representative pursuant to Paragraph 3(d) above with respect to those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Presiding Judge for resolution.

9. (a) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Protected Materials pursuant to this Protective Order unless that Reviewing Representative has first executed a Non-Disclosure Certificate; provided that if an attorney qualified as a Reviewing Representative has executed such a certificate, the paralegals, secretarial and clerical personnel under the attorney's instruction, supervision or control need not do so. A copy of each Non-Disclosure Certificate shall be provided to counsel for the Participant asserting confidentiality prior to disclosure of any Protected Material to that Reviewing Representative.

(b) Attorneys qualified as Reviewing Representatives are responsible for ensuring that persons under their supervision or control comply with this order.

10. Any Reviewing Representative may disclose Protected Materials to any other Reviewing Representative as long as the disclosing Reviewing Representative and the receiving Reviewing Representative both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Protected Materials are disclosed ceases to be engaged in these proceedings, or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraph 3(d), access to Protected Materials by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a Non-Disclosure Certificate shall continue to be bound by the provisions of this Protective Order and the certification.

11. Subject to Paragraph 17, the Presiding Administrative Law Judge or Commission shall resolve any disputes arising under this Protective Order. Prior to presenting any dispute under this Protective Order to the Presiding Administrative Law Judge or Commission, the parties to the dispute shall use their best efforts to resolve it. Any participant that contests the designation of materials as protected shall notify the party that provided the protected materials by specifying in writing the materials whose designation is contested. This Protective Order shall automatically cease to apply to such materials five (5) business days after the notification is made unless the entity which designated the materials as protected, within said 5-day period, files a motion with the Presiding Administrative Law Judge or Commission, with supporting affidavits, demonstrating that the materials should continue to be protected. In any challenge to the designation of materials as protected, the burden of proof shall be on the entity seeking



protection. If the Presiding Administrative Law Judge or Commission finds that the materials at issue are not entitled to protection, the procedures of Paragraph 17 shall apply. The procedures described above shall not apply to protected materials designated by a Participant as Critical Energy Infrastructure Information. Materials so designated shall remain protected and subject to the provisions of this Protective Order, unless a Participant requests and obtains a determination from the Commission's Critical Energy Infrastructure Information Coordinator that such materials need not remain protected.

12. All copies of all documents reflecting Protected Materials, including the portion of the hearing testimony, exhibits, transcripts, briefs and other documents which refer to Protected Materials, shall be filed and served in sealed envelopes or other appropriate containers (including properly designated electronic means) endorsed to the effect that they are sealed pursuant to this Protective Order. Such documents shall be marked "PROTECTED MATERIALS" and shall be filed under seal and served under seal upon the Presiding Judge and all Reviewing Representatives who are on the service list. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information - Do Not Release." If the Protected Materials contain information that the disclosing Participant believes in good faith contains market sensitive information, public disclosure of which would competitively harm the Participant, the Participant producing such information shall additionally mark on each page containing such information the words "CONTAINS MATERIAL NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL." For anything filed under seal, redacted versions or, where an entire document is protected, a letter indicating such, will also be filed with the Commission and served on all parties on the service list and the Presiding Judge. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such material. Counsel shall take all reasonable precautions necessary to assure that Protected Materials are not distributed to unauthorized persons.

13. If any Participant desires to include, utilize or refer to any Protected Materials or information derived therefrom in testimony or exhibits during the hearing in these proceedings in such a manner that might require disclosure of such material to persons other than Reviewing Representatives, such Participant shall first notify both counsel for the disclosing Participant and the Presiding Judge of such desire, identifying with particularity each of the Protected Materials. Thereafter, use of such Protected Material will be governed by procedures determined by the Presiding Judge.

14. Nothing in this Protective Order shall be construed as precluding any Participant from objecting to the use of Protected Materials on any legal grounds.

15. Nothing in this Protective Order shall preclude any Participant from requesting the Presiding Judge, the Commission, or any other body having appropriate authority, to find that this Protective Order should not apply to all or any materials previously designated as Protected Materials pursuant to this Protective Order. The Presiding Judge may alter or amend this Protective Order as circumstances warrant at any time during the course of this proceeding.

16. Each party governed by this Protective Order has the right to seek changes in it as appropriate from the Presiding Judge or the Commission.

17. All Protected Materials filed with the Commission, the Presiding Judge, or any other judicial or administrative body, in support of, or as a part of, a motion, other pleading, brief, or other document, shall be filed and served in sealed envelopes or other appropriate containers (including properly designated electronic means) bearing prominent markings indicating that the contents include Protected Materials subject to this Protective Order. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information – Do Not Release." Such documents containing materials not available to competitive duty personnel shall be additionally marked "CONTAINS MATERIAL NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL."

18. If the Presiding Judge finds at any time in the course of this proceeding that all or part of the Protected Materials need not be protected, those materials shall, nevertheless, be subject to the protection afforded by this Protective Order for three (3) business days from the date of issuance of the Presiding Judge's determination, and if the Participant seeking protection files an interlocutory appeal or requests that the issue be certified to the Commission is filed, for an additional seven (7) business days. None of the Participants waives its rights to seek additional administrative or judicial remedies after the Presiding Judge's decision respecting Protected Materials or Reviewing Representatives, or the Commission's denial of any appeal thereof. The provisions of 18 CFR §§ 388.112 and 388.113 shall apply to any requests under the Freedom of Information Act. (5 U.S.C. § 552) for Protected Materials in the files of the Commission.

19. Nothing in this Protective Order shall be deemed to preclude any Participant from independently seeking through discovery in any other administrative or judicial proceeding information or materials produced in this proceeding under this Protective Order.

20. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Protected Materials.

21. The contents of Protected Materials or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with this Protective Order and shall be used only in connection with this (these) proceeding(s). Any violation of this Protective Order and of any Non-Disclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**PPL Corporation**

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**E.ON U.S. LLC**

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**Docket No. EC10-\_\_\_-000**

**NON-DISCLOSURE CERTIFICATE**

I hereby certify my understanding that access to Protected Materials is provided to me pursuant to the terms and restrictions of the Protective Order in this proceeding, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Representing: \_\_\_\_\_

**APPENDIX 3**

**AFFIDAVIT OF DR. JOSEPH A. KALT AND MR. A. JOSEPH CAVICCHI**

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

**PPL Corporation**  
**E.ON U.S. LLC**

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**Docket No. EC10-\_\_-000**

Affidavit of

A. Joseph Cavicchi  
and  
Joseph P. Kalt

June 28, 2010

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## I. Qualifications and Summary

1. Our names are Joseph P. Kalt, Ph.D., and A. Joseph Cavicchi. Prof. Kalt is the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts. The Kennedy School of Government is Harvard's graduate school for public policy and administration. Prof. Kalt is also a Senior Economist at Compass Lexecon. A. Joseph Cavicchi is a Senior Vice President at Compass Lexecon. Our *curricula vitae* are attached hereto as Appendices 1 and 2. Our business address is 200 State Street, 9th Floor, Boston, Massachusetts 02109. Compass Lexecon is an FTI Consulting company specializing in, among other areas, economic and regulatory policy advice to private and public organizations in traditionally regulated industries.
2. This affidavit evaluates whether PPL Corporation's (together with its subsidiaries, "PPL") proposed acquisition of E.ON U.S. LLC (together with its subsidiaries, "E.ON US")<sup>1</sup> will have an adverse effect on competition in wholesale electricity markets. We conclude that there is no potential for an adverse competitive impact associated with the proposed acquisition.
3. As we explain herein, the proposed acquisition of E.ON US by PPL does not result in the combination of two companies that otherwise make significant overlapping sales of electricity products in the same relevant geographic markets. PPL's electric assets are mostly located in central and eastern Pennsylvania, and PPL's sales of electricity products in the eastern interconnect are primarily in the wholesale electricity markets operated by the PJM Regional Transmission Organization ("PJM RTO"). E.ON US's electric assets are located predominately in Kentucky and are used primarily to meet Louisville Gas and Electric Company's ("LG&E") and Kentucky Utilities Company's ("KU") retail electric franchise obligations. Simply based on the locations of the companies' assets and power sales, there is little reason to expect a competitive impact from the proposed acquisition.

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<sup>1</sup> Our analysis includes only E.ON US and its subsidiaries (the only entities being acquired by PPL via the transaction), and, in particular excludes E.ON Climate and Renewables, N.A. and its subsidiaries which are not part of the transaction.

4. The detailed analysis presented below confirms that the companies' lack of geographic or competitive overlap effectively eliminates any cause for concern regarding the transaction's potential competitive impact on wholesale electricity markets. Transmission interconnections between the PJM RTO and the LG&E/KU Balancing Authority Area ("BAA") are limited when compared to the generating capacity in these two regions. Historical sales data clearly demonstrate that PPL's and E.ON US's electricity sales only overlap geographically by a very small amount. Moreover, historical data show that PPL does not sell power in the LG&E/KU BAA, and that E.ON US sells only a *de minimis* amount of electric energy in the PJM RTO.<sup>2</sup>
5. E.ON US does not have market-based sales authority in the LG&E/KU BAA, or in the Big Rivers Electric Corp. ("BREC") BAA, and outside these BAAs they face significant competition from numerous other suppliers located in the midwestern, the mid-Atlantic and the southeastern U.S. Thus, there is no ability or incentive for E.ON US to benefit from an imagined monopolistic withholding of supply in their BAA, and any attempt to affect prices outside their BAA would be met by significant competition.
6. In spite of the demonstrated lack of historical sales overlap, and the recognition that this will not change materially going forward following the acquisition of E.ON US by PPL, we have applied the Commission's horizontal market power delivered price test ("DPT") analyses to several geographic areas. The DPT analyses confirm what has been observed historically, namely the limited geographic overlap of PPL's and E.ON US's commercial activities.
7. In particular, DPT screening analyses conducted in conformance with the Commission's rules show that there are no screen failures associated with the proposed transaction. As would be expected, in the PJM RTO where there are some overlapping sales between PPL and E.ON US, the market is generally unconcentrated and E.ON US's supply into that market is constrained by limited import capability. As a result, there is straightforwardly no adverse competitive impact on the PJM RTO as a result of the proposed transaction. With respect to the LG&E/KU BAA, the market is highly concentrated in some periods and

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<sup>2</sup> The historical sales data essentially show that E.ON US makes some sales of excess power into the PJM RTO. However, the amount is small when compared to the size of the PJM RTO market.



moderately concentrated and unconcentrated in other periods, as one would expect in a non-RTO market with a vertically integrated utility. However, PPL's supply potential in the LG&E/KU BAA is proportionately small due to many potential suppliers located in PJM that can access transmission to this market. Thus, although the screening statistic thresholds are tighter when compared to the PJM RTO, there are no screen failures for the LG&E/KU BAA. In other markets, the overlap is further limited as each company's supply would reach the market only as imports. In these markets, as would be expected, there are no screen failures. Thus, the DPT competitive screen analyses confirm that the limited overlap between PPL and E.ON US results in no adverse competitive impacts associated with the proposed transaction.

8. We have also examined possible vertical market power impacts and find none. PPL and E.ON US do not control access to electric transmission; own or control only a few of the sites available for the development of new generation capacity in the region where their electric assets are located; do not have the ability to prevent the siting of new generation facilities; and cannot impact competitors' access to inputs such as fuel. Thus, the acquisition will not result in any adverse impact on vertical market power.
9. In the following sections, we describe the Applicants and review the Commission's framework for assessing the potential competitive impact of the proposed acquisition. We then present the results of competitive impact analyses (DPTs) we carried out consistent with the Commission's rules. We conclude that the proposed transaction does not have any realistic potential for an adverse effect on electric market competition in any relevant geographic market.

## **II. The Applicants**

10. PPL Corporation is a public utility holding company that owns a regulated electric distribution company, PPL Electric Utilities Corporation ("PPL Electric"). PPL Electric is a direct, wholly owned subsidiary of PPL. It owns no generation, but engages in purchases and sales of electric products. PPL Electric has market-based rate authority<sup>3</sup> and owns

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<sup>3</sup> *Pa. Power & Light Co.*, 80 FERC ¶ 61,053 (1997) (market-based rate authority); *PP&L, Inc.*, Docket No. ER98-3453-000 (Letter Order issued July 28, 1998) (resale of transmission rights and associated ancillary services); *PP&L, Inc.*, Docket No. ER98-4533-000 (Letter Order issued Oct. 16, 1998) (sales to affiliates); *PP&L, Inc.*,

transmission facilities located within the PJM RTO. PJM directs the operation of PPL Electric's transmission facilities, and transmission service over these facilities is provided under the PJM Open Access Transmission Tariff ("PJM OATT"). PPL Electric has no captive wholesale or retail customers,<sup>4</sup> but it is the default supplier for retail customers within its service territory under Pennsylvania's Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. §§ 2801, et seq.

11. The following generating companies are indirect, wholly owned subsidiaries of PPL in the PJM RTO region: Lower Mount Bethel Energy; PPL University Park, LLC; PPL Brunner Island, LLC; PPL Holtwood, LLC; PPL Martins Creek, LLC; PPL Montour, LLC; PPL New Jersey Biogas, LLC; PPL New Jersey Solar, LLC; PPL Renewable Energy, LLC and PPL Susquehanna, LLC. PPL EnergyPlus, LLC ("PPL EnergyPlus"), an indirect, wholly owned subsidiary of PPL Corporation, markets electricity on behalf of the PPL generating companies. Consistent with Commission regulations, in our DPT analyses we attribute to PPL the capacity owned or controlled by PPL's various generating and marketing subsidiaries.
12. Exhibit No. 1 lists the generating facilities owned by or under long-term contract to PPL's subsidiaries. In compiling these data, we have included PPL Montour, LLC's ownership interests in the Keystone and Conemaugh generating facilities (12% and 16%, respectively). In addition, we include PPL Holtwood, LLC's 33% ownership interest in the Safe Harbor Water Power Corporation's hydroelectric facility. Finally, we have reduced the capacity of the PPL Susquehanna, LLC facility by 10% to account for Allegheny Electric Cooperative's ownership interest.<sup>5</sup> As Exhibit No. 1 shows, PPL's subsidiaries own or control by long-term contract less than 9,800 MW of capacity in the PJM region.
13. E.ON US is a public utility holding company and the direct parent of, among others, LG&E and KU. These are vertically integrated public utilities with operations primarily in the

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Docket No. ER99-3294-000 (Letter Order issued July 22, 1999) (sale of specified ancillary services); *PPL Elec. Utils. Corp. et al.*, 125 FERC ¶ 61,075 (2008) (triennial market power update).

<sup>4</sup> See *PPL Elec. Utils. Corp., et al.*, Docket Nos. ER00-1712-010, et al. (Letter Order issued Mar. 25, 2009) (finding that PPL companies have no captive customers and granting waiver of affiliate restrictions).

<sup>5</sup> We have excluded from the analysis approximately 40 MW of intermittent fuel cell capacity and other very small biomass generating capacity owned by PPL New Jersey Biogas, LLC, PPL New Jersey Solar, LLC and PPL Renewable Energy, LLC. These facilities are insignificant and cannot be withheld from the market.

Commonwealth of Kentucky. LG&E owns and operates electric generation, transmission and distribution facilities in Kentucky, and also natural gas distribution and storage facilities in Kentucky and Indiana. KU owns and operates electric generation, transmission and distribution facilities in Kentucky, with limited operations in Tennessee and Virginia. Exhibit No. 2 lists the generating facilities owned in whole or in part by LG&E and KU, the only E.ON US subsidiaries subject to the transaction that own or have contractual rights to generating capacity.<sup>6</sup>

14. LG&E and KU operate a joint electric BAA and are the only U.S. entities affiliated with E.ON US that have franchised service territories. LG&E and KU have received Commission authority to engage in wholesale sales of capacity and energy at market-based rates outside the LG&E/KU and BREC BAAs.<sup>7</sup>
15. LG&E and KU provide transmission service under a single Open Access Transmission Tariff (“OATT”). Under the terms set by the Commission in approving their withdrawal from Midwest Independent Transmission System Operator, Inc. (“MISO”) in 2006, LG&E and KU contracted with Southwest Power Pool (“SPP”) and the Tennessee Valley Authority (“TVA”) to serve as an independent transmission organization (“ITO”) and a reliability coordinator, respectively, of their electric transmission facilities. In addition, TVA is responsible for coordination of the interfaces between LG&E/KU’s transmission system and MISO and PJM under the Joint Reliability Coordination Agreement.
16. LEM is a power marketer that does not own any generating facilities and does not presently make any sales. LEM has on file with the Commission a tariff for the sale of wholesale

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<sup>6</sup> Although KU holds a 20 percent interest in Electric Energy, Inc. (“EEInc”), it has no rights to the output of EEInc’s generating facilities.

<sup>7</sup> See, e.g., *Louisville Gas & Elec. Co.*, 85 FERC ¶ 61,215 (1998) (accepting for filing joint market-based rate tariff of LG&E and KU, FERC Electric Tariff, Original Volume No. 2); *Louisville Gas & Elec. Co.*, Docket No. ER02-1077-000 (Letter Order issued Apr. 16, 2002) (accepting “short form” market-based rate tariff of LG&E and KU, FERC Electric Tariff, Original Volume No. 3); *LG&E Energy Mktg. Inc.*, 113 FERC ¶ 61,229, at P 28 (2005) (finding that LG&E, KU, and LG&E Energy Marketing, Inc. (“LEM”) have failed to rebut the presumption of market power in the BREC control area); *LG&E Energy Mktg. Inc.*, Docket Nos. ER06-1046-000, *et al.* (Letter Order issued July 6, 2006) (accepting for filing revised tariff sheets prohibiting sales in the LG&E/KU and BREC control areas).

capacity and energy at market-based rates.<sup>8</sup> Like LG&E and KU, however, such authority does not extend to sales in the LG&E/KU or BREC BAAs.<sup>9</sup>

17. LG&E owns and operates natural gas transmission lines located primarily in Kentucky,<sup>10</sup> and an intrastate natural gas distribution business located entirely within Kentucky.<sup>11</sup> In addition, LG&E owns five natural gas storage fields, four of which are located in Kentucky and one of which (Doe Run) is located in both Kentucky and Indiana. These five natural gas storage fields, combined, have a working gas capacity of approximately 15.1 bcf. LG&E's gas distribution system is also used by large commercial and industrial customers who purchase natural gas directly from alternative suppliers. LG&E does not provide gas to, nor do LG&E gas distribution lines connect to, any competing electric generators.
18. KU holds a 20 percent interest in EEInc. EEInc owns and operates a six-unit coal-fired generating facility, with a capacity of approximately 1,002 MW (summer rated), which is located in Joppa, Illinois. EEInc's wholly-owned subsidiary, Midwest Electric Power Inc. ("MEPI"), owns and operates two gas turbines with a total capacity of approximately 74 MW (summer rated) in Joppa, Illinois. Output from EEInc's and MEPI's generating facilities is under the operation and control of a subsidiary of Ameren Corporation, and neither KU nor any affiliate of KU has any rights to the output of the generating facilities. As such, we do not include this in our DPT analysis as a resource of E.ON US.
19. LG&E and KU hold a combined 8.13 percent interest in Ohio Valley Electric Cooperative ("OVEC"). OVEC and its wholly owned subsidiary, Indiana Kentucky Electric Corporation, own, respectively, the 986 MW (summer rated) Kyger Creek Generating

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<sup>8</sup> *LG&E Power Mktg., Inc.*, 68 FERC ¶ 61,247 (1994), modified on other grounds, 69 FERC ¶ 61,153 (1994). LEM was formerly known as LG&E Power Marketing Inc. See *LG&E Power Mktg., Inc.*, Notice of Name Change, Docket No. ER97-3418-000 (filed June 24, 1997). *WKE Station Two Inc.*, 82 FERC ¶ 61,178 (1998) (accepting for filing market-based rate tariffs of WKE StationTwo and WKEC).

<sup>9</sup> *LG&E Energy Mktg. Inc.*, 113 FERC ¶ 61,229, at P 28 (2005) (finding that LG&E, KU, and LEM have failed to rebut the presumption of market power in the BREC control area); *LG&E Energy Mktg. Inc.*, Docket Nos. ER06-1046-000, *et al.* (Letter Order issued July 6, 2006) (accepting for filing revised tariff sheets prohibiting sales in the LG&E/KU and BREC control areas).

<sup>10</sup> Approximately 10 miles of one gas transmission main associated with the Doe Run storage field is located in Indiana.

<sup>11</sup> LG&E and KU jointly own and operate an approximately six mile natural gas transmission pipeline within Kentucky that links the Trimble County generating facility to an unaffiliated interstate gas transmission line. KU owns and operates an approximately eleven mile natural gas transmission pipeline within Kentucky that links the Brown generating facility to unaffiliated interstate gas transmission lines.

Facility located in Gallipolis, Ohio, and the 1,196 MW (summer rated) Clifty Creek Generating Facility located in Madison, Indiana. Both of these facilities are located in the OVEC BAA. LG&E and KU, combined, have rights to 8.13 percent of the facilities' output. We include this capacity in our DPT analyses as a resource of E.ON US.

### **III. Framework for an Analysis of the Competitive Impact of the Proposed Transaction**

#### **A. Background**

20. Under the Commission's rules, prior to conducting a screening analysis, an initial review of applicants' assets and historical sales is carried out to determine whether there are geographic regions in which both companies conduct business. In those instances where there is either no overlap, or only a *de minimis* overlap, no competitive impact analysis is required.<sup>12</sup> When both companies own assets in the same geographic region, or where there are significant overlapping sales, a screening analysis is typically required.
21. When a competitive screen analysis is required, the Commission requires that it be conducted as described in Appendix A to the Commission's Merger Policy Statement,<sup>13</sup> as modified in Order No. 642.<sup>14</sup> Order No. 642 sets forth horizontal market power screening tests that applicants must apply in association with a proposed transaction. The Commission's competitive impact analysis screens analyze relevant geographic markets for an increase in the incentive or ability to exercise horizontal or vertical market power as a result of the transaction. When assessing horizontal market power, the Commission requires that applicants conduct a DPT. The DPT investigates the extent to which the post transaction market structure may be more concentrated than prior to the transaction. When examining vertical market power, the Commission considers the possibility that a company may be able to impede entry, foreclose competitors, or have an increased incentive to raise rivals' costs as a result of the proposed transaction.

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<sup>12</sup> The Commission's regulations at Section 33.3(a)(2)(i) state that a horizontal competitive analysis screen need not be filed if the applicant "demonstrates that the merging entities do not currently conduct business in the same geographic markets or that the extent of the business in the same geographic markets is *de minimis*." 18 C.F.R. § 33.3(a)(2)(i) (2010).

<sup>13</sup> *Inquiry Concerning the Commission's Merger Policy Under the Federal Power Act: Policy Statement*, Order No. 592, FERC Stats. & Regs. ¶ 31,044 (1996), *on reconsideration*, Order No. 592-A, 79 FERC ¶ 61,321 (1997).

<sup>14</sup> *Revised Filing Requirements Under Part 33 of the Commission's Regulations*, Order No. 642, 65 Fed. Reg. 70,983, at 70,990 (Nov. 28, 2000), FERC Stats. & Regs. ¶ 31,111 (2000) ("Order No. 642"), *order on reh'g*, Order No. 642-A, 66 Fed. Reg. 16,121 (Mar. 23, 2001), 94 FERC ¶ 61,289 (2001).

22. Although the data required to execute the DPT are numerous, the conceptual approach is straightforward: The companies proposing the transaction identify relevant geographic markets based on where they currently offer products for sale (typically based on historical sales reports), and they identify various seasonal time periods representative of variations in load (and thus market prices). Through application of the DPT, the companies then establish, by the use of the Herfindahl Hirschman Index (“HHI”), the impact of the proposed transaction on the relevant geographic market structures by calculating the pre- and post-transaction HHI market concentration values. The difference between the pre- and post-transaction HHIs are then interpreted using screens established by the Commission to assess whether the proposed transaction may raise concerns about possible anticompetitive impacts. FERC’s competitive impact analysis screens are derived from the *Horizontal Merger Guidelines* of the U.S. Department of Justice and Federal Trade Commission.<sup>15</sup>
23. The results are initially interpreted using the guidelines provided in Order No. 642. After calculating pre- and post-transaction market concentration, and changes in market concentration, the results are assessed against the following three levels of post-transaction concentration:
- (1) An unconcentrated post-merger market -- if the post-[transaction] HHI is below 1000, regardless of the change in HHI the [transaction] is unlikely to have adverse competitive effects;
  - (2) A moderately concentrated post-merger market -- if the post-[transaction] HHI ranges from 1000 to 1800 and the change in HHI is greater than 100, the [transaction] potentially raises significant competitive concerns; and
  - (3) A highly concentrated post-merger market -- if the post-[transaction] HHI exceeds 1800 and the change in the HHI exceeds 50, the [transaction] potentially raises significant competitive concerns; if the change in HHI exceeds 100, it is presumed that the [transaction] is likely to create or enhance market power.<sup>16</sup>

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<sup>15</sup> The Commission’s screening levels are based on the U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, 4 Trade Reg. Rep. (CCH) ¶ 13,104 (1997).

<sup>16</sup> Order No. 642, FERC Stats. & Regs. ¶ 31,111, at p. 31,896 n.62. The Department of Justice and Federal Trade Commission recently proposed revisions to its guidelines which suggest an increase in the HHI presumed to delineate an unconcentrated market from 1,000 to 1,500. See *Horizontal Merger Guidelines, For Public Comment*:

If a proposed transaction does not violate the Commission's guidelines for evaluating the transaction's impact, it is unlikely to be anticompetitive.

24. If the proposed transaction does result in competitive screen failures, the Commission goes on to examine a number of factors to determine whether the transaction is in the public interest. These include: the potential adverse competitive effects of the transaction; the potential for entry and the role that entry would play in mitigating any adverse competitive impacts; efficiency gains that cannot be achieved by means other than the transaction; and the possibility that, but for the transaction, one of the parties to the transaction would fail, causing its assets to exit the market.
25. As we explain below, the results of an analysis for PPL and E.ON US strongly suggest only a *de minimis* overlap in historical market activity between PPL and E.ON US. This would indicate no need for detailed DPT analyses. Nevertheless, we have applied the Commission's Appendix A horizontal competitive analysis screening process to the proposed transaction for various relevant geographic markets. In the following sections, we analyze historical sales of electric products by PPL and E.ON US; define relevant products and identify destination markets; present the results of the DPT screening analyses; and evaluate potential vertical market power concerns.

## **B. Competitive Impact Analysis of the Proposed Transaction**

### **1. Horizontal Market Power**

26. Consistent with the Commission's regulations, the first step when evaluating the competitive impact of a proposed acquisition is to define relevant products currently sold by the companies. The most suitable data available to evaluate products currently sold by the companies are those data reported in the companies' Electric Quarterly Reports ("EQRs")<sup>17</sup> with the Commission. Thus, for the purposes of this affidavit, we have defined relevant products based on an assessment of those products sold by PPL and E.ON US

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Released on April 20, 2010 at 19, available at <http://www.ftc.gov/os/2010/04/100420hmg.pdf>; see also Federal Trade Commission Seeks Views on Proposed Update of the Horizontal Merger Guidelines, available at <http://www.ftc.gov/opa/2010/04/hmg.shtm> (noting that the guidelines have not been significantly updated in eighteen years and that the proposal would "update" the concentration levels likely to require further scrutiny).

<sup>17</sup> See FERC, EQR Downloadable Spreadsheets, <http://www.ferc.gov/docs-filing/eqr/data/spreadsheet.asp>.

during the most recent two calendar years 2008-2009.<sup>18</sup> During these years, the EQRs filed by PPL and E.ON US reveal that the primary Commission-jurisdictional product that both companies sell is wholesale electric energy.<sup>19</sup> The competitive impact analysis focuses on firm and non-firm electric energy products.<sup>20</sup>

27. To determine the geographic scope of the competitive impact analysis, we have examined both the BAAs where PPL and E.ON US generation assets are interconnected to the electric transmission system, and the geographic location of power sales reported by PPL and E.ON US in their EQRs.<sup>21</sup> The two primary regions of interest are (1) the LG&E/KU BAA, where the majority of E.ON US's electric generation assets are geographically located, and (2) the PJM RTO, where the majority of PPL's electric generation assets in the eastern interconnect are geographically located.<sup>22</sup>
28. We have also examined power sales reported by PPL and E.ON US to identify wholesale buyers and to determine if sales overlap in other geographic regions. The analyses reveal that on an historical basis there is *de minimis* geographic overlap in energy sales by PPL and E.ON US. For example, 2008-2009 EQR filings show that the only product that both E.ON US and PPL sell in the same geographic regions is electric energy.<sup>23</sup> Exhibit No. 3 shows that the only two geographic regions where PPL and E.ON US's wholesale *energy* sales overlap are the PJM RTO and MISO. Exhibit No. 3 also shows that PPL makes significant electric wholesale energy sales in the PJM RTO where most of PPL's generation assets are located. E.ON US's sales in the PJM RTO are negligible in

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<sup>18</sup> 18 C.F.R. § 33.3(c)(1).

<sup>19</sup> We also considered ancillary services and capacity but did not find any evidence that there have been overlapping sales of capacity or ancillary services. That is, although PPL sells some of these services in PJM, E.ON US does not sell any ancillary services or capacity in PJM primarily because its power plants are not located within PJM.

<sup>20</sup> In some instances, long-term capacity market sales might be evaluated; however, EQR data show that PPL and E.ON US do not sell capacity in overlapping markets. Moreover, the Commission has previously concluded that if there are no barriers to entry, and applicants do not control plant sites or fuel supply and delivery systems that allow barriers to entry to be erected, then the long-term capacity market will not be impacted. *See, e.g.*, Atlan. City Elec. Co., 80 FERC ¶ 61,126, at p. 61,405 (1997). As we explain in greater detail below, PPL and E.ON US cannot erect barriers to entry and do not control key competitor inputs such as fuel supplies.

<sup>21</sup> *See* FERC, EQR Downloadable Spreadsheets, <http://www.ferc.gov/docs-filing/eqr/data/spreadsheet.asp>.

<sup>22</sup> PPL owns a small amount of generating capacity in New England; however, the amount is insignificant and two wheels away from PJM.

<sup>23</sup> These transactions are typically a mixture of firm and non-firm energy sales with firm sales quantities considerably greater than non-firm sales; however, we note that E.ON US does not sell a capacity product such as that sold by PPL in PJM's forward capacity market auctions.



comparison.<sup>24</sup> In addition, Exhibit No. 3 shows that PPL has not made wholesale sales in the LG&E/KU BAA during the years 2008-2009. Finally, Exhibit No. 3 shows a small amount of energy sales overlap in MISO, but neither PPL nor E.ON US owns assets in MISO. Moreover, these sales are negligible when compared to the amount of power generated annually by all suppliers in the MISO RTO.<sup>25</sup>

29. These results are reasonably interpreted to mean that the Commission’s regulations do not require that horizontal competitive analysis screenings be conducted. We nonetheless have conducted Appendix A screening analyses for four geographic markets. We have analyzed the PJM RTO and MISO RTO where there are overlapping wholesale sales.<sup>26</sup> In addition, notwithstanding a lack of overlapping sales, we also have analyzed the LG&E/KU BAA and the East Kentucky Power Cooperative (“EKPC”) BAA where the potential for overlapping sales might be considered relevant. We have not analyzed the OVEC “generation only” BAA where there is only *de minimis* load. We also have not analyzed the BREC BAA, which is not a first tier interconnect to PJM, or the TVA BAA, which limits sales by suppliers located outside of its BAA.<sup>27</sup> In short, although there are no regions where there is overlapping ownership of generation or significant overlapping historical wholesale sales between PPL and E.ON US, we have conducted screening analyses of those geographic markets where the possibility for overlap exists. In Section IV below, we present our horizontal screening analyses.

#### **IV. The DPT Analysis**

30. As we explained above, a DPT analysis was conducted consistent with the Commission’s Appendix A requirements for various relevant geographic markets. The analysis was conducted for the PJM and MISO RTOs, and the LG&E/KU and EKPC BAAs. Our base

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<sup>24</sup> PPL reports on the order of 100,000 GWh per year of sales, while E.ON US reports approximately 500-1,600 GWh per year.

<sup>25</sup> PPL and E.ON US collectively report approximately 3,000-6,000 GWh per year, which is 340-680 MW on average per year. This is a fraction of a percent of the more than 130,000 MW in the MISO market.

<sup>26</sup> We have not analyzed PJM’s eastern submarket. An analysis of this smaller subregion within the PJM BAA would find that E.ON US’s supply would be squeezed down to very small amounts resulting in practically no impact.

<sup>27</sup> Although TVA and PJM are interconnected, TVA only permits limited, if any, competition within its borders. Moreover, the TVA region has approximately 40,000 MW of electric generation such that PPL and LG&E/KU would at most be very small suppliers. Because BREC is not a first tier interconnect to PJM, PPL’s electric generation is two wheels away and an inconsequential supplier in a DPT.

case analysis assumes that FirstEnergy will join PJM as of June 1, 2011; however, it does not assume that other pending merger and acquisition applications which might affect the PJM RTO have been consummated. These include: FirstEnergy's acquisition of Allegheny Power; a Calpine subsidiary's acquisition of Conectiv Energy Holding Company; and Mirant Corporation's and RRI Energy's proposed merger. We did, however, consider the impact of these pending transactions and found that they would not materially affect the results of the analyses as the market shares and HHI changes would change only minimally. We also considered the impact of the recently announced intention of Duke Ohio to join PJM and found that this event would enlarge the PJM RTO market and have no adverse impact on the results of our analysis.<sup>28</sup>

31. The network used in the analysis is shown in Exhibit No. 4. The network was defined based on the first tier interconnects to the LG&E/KU BAA. These include PPL's PJM RTO assets. In particular, there are six first tier interconnections to the LG&E/KU BAA: PJM RTO, MISO RTO, EKPC, OVEC, BREC, and TVA.<sup>29</sup> The various flow directions between the different BAAs that have been analyzed are depicted in Exhibit No. 4.
32. The test year used for the analysis is December 2010 – November 2011. This is based on the expected closing date of the proposed transaction of December 31, 2010. The use of this test year allows the winter period to be a set of consecutive months for which certain forward market data are used to establish electricity and fuel prices for the analysis. In addition, historical data used to develop baseline values for the inputs can also be gathered so as to mirror a winter baseline period that contains consecutive months (i.e., Dec.-Feb.).<sup>30</sup>
33. The time periods that differentiate the energy products seasonally were selected consistent with historically observed load levels and market prices. In each season (summer, winter, shoulder), three time periods were analyzed: super-peak, on-peak, and off-peak. In the

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<sup>28</sup> We also recognize that BREC will be joining MISO in the future; however, we have treated BREC as an independent BAA in the DPT analysis. BREC is a very small BAA and whether or not it is combined with MISO does not materially affect the results of the DPT.

<sup>29</sup> EEInc is also interconnected to LG&E/KU; however, for the purposes of this analysis we have combined it with TVA consistent with recent Commission guidance (*Carolina Power & Light Co., et al.*, 128 FERC ¶ 61,039, at Appendix A (2009) ("Southeast SIL Order") (Order On Simultaneous Transmission Import Limit Studies for the Southeast Region)).

<sup>30</sup> We note that the use of a Dec.-Feb. time period for the winter season is the same approach used by the Commission when analyzing requests for market-based rate authority.

summer, an absolute-peak period, which is defined by the peak hour, was analyzed as well. For the super-peak period, the top 10 percent of the hours during the peak period compose the time period. For the on-peak period, the remaining 90 percent of the peak hours compose the time period. The remaining hours that are considered off-peak for each of the seasons were used.

34. The use of these time periods is based on the observation that power prices and load levels vary both seasonally and diurnally. In addition, analysis of historical prices and loads reveals that a relatively high frequency of higher prices and loads tends to be concentrated in certain portions of the on-peak periods of the different seasons.<sup>31</sup> The variation in price levels is primarily the result of different electric generating units being the source of marginal supply as load changes. During off-peak periods, lower load levels lead to coal fired generating units being marginal. As loads increase during on-peak periods, more expensive coal plants and eventually gas-fired generating technology become marginal. At higher load levels, the least efficient gas-fired plants as well as infrequently operated oil or diesel fired plants will be marginal. Segmenting the year into these time periods allows for an analysis of multiple expected operating conditions.
35. Electricity price levels used for the DPT screening analyses were established using recently reported electricity forward prices for the “into Cinergy” and PJM West wholesale power trading hubs. These data—reported as expected monthly on-peak and off-peak prices—were then adjusted to differentiate the super-peak and on-peak periods. In particular, to calculate the super-peak and on-peak period prices, hourly 2008-2009 wholesale electricity price data were gathered for the Cinergy hub, the PJM West hub, and the LG&E/KU BAA border with MISO.<sup>32</sup>
36. Hourly price data for 2008-2009 were used to calculate historically observed super-peak and on-peak price averages, consistent with the segmentation described above. The ratio of

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<sup>31</sup> Our workpapers provide an analysis of the different seasonal breakdowns of prices and loads, and the relationship of prices and loads, in these particular periods.

<sup>32</sup> We also examined the LG&E/KU BAA reported system lambdas for the 2008-2009 time period. However, because these lambdas represent LG&E/KU’s production costs and are not representative of what a prevailing market-based pricing sale would be, we used the LG&E/KU-MISO border price as a basis for LG&E/KU BAA market-based prices. Moreover, E.ON US’s sales within the LG&E/KU BAA are cost based while sales at the border with MISO are market-based. Thus, E.ON US cannot exercise market power within the LG&E/KU BAA.

the super-peak and other on-peak hour averages to the all on-peak hours averages was then used to break down the seasonal average monthly forward prices into super-peak and all other on-peak hour prices. This analysis causes the super-peak prices to be higher than the reported all hours on-peak forward prices, and the all other hours on-peak prices to be slightly lower than the reported all hour on-peak forward prices. This result is consistent with the prices historically observed in the wholesale electricity markets.

37. The results of this analysis are shown in Exhibit No. 5. Exhibit No. 5 shows, as expected, that the price levels used for the DPT vary geographically, seasonally and diurnally consistent with both historically observed prices and expected future prices. The price levels used for the LG&E/KU BAA, the EKPC BAA and the MISO RTO are nearly identical. This is consistent with recently reported MISO prices which generally show modest congestion.<sup>33</sup> The PJM prices are somewhat higher representing the different fuel mixture relied upon in PJM RTO for electricity supply. Also, as intended in a DPT analysis, the selected price levels cover a wide range of load conditions capturing different levels of generation operation typically experienced throughout the year.<sup>34</sup>
38. Generation unit data for the analysis were gathered primarily from Ventyx Velocity Suite Products (“Ventyx”). These data provide a starting point for obtaining generation unit characteristics including ownership, geographic location, summer and winter capacities, heat rates, emissions rates, and variable operation and maintenance costs. The ownership of capacity and geographic location information provided by Ventyx is compared with recent company market-based rate filings, Commission Form No. 714 filings, and company reported data. Generally, the Ventyx data are accurate and used as reported; however, in certain instances minor corrections to ownership attribution are made to these data. These corrections are reported in the workpapers provided with this affidavit.
39. For hydroelectric generation facilities, monthly production data were used to estimate seasonal capacity ratings by examining the most recent five full years of monthly generation data (2005-2009), as reported by the Energy Information Administration

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<sup>33</sup> David B. Patton, Ph.D., Midwest ISO IMM Quarterly Report, First Quarter 2010, Potomac Economics, Apr. 14, 2010 at 3-4.

<sup>34</sup> The summer absolute-peak period price is checked to be sure it is high enough to capture the majority of the generation supply. However, in a few instances, there are very small, inefficient fuel oil fired generation resources whose operating costs may render them uneconomic even during the absolute-peak period.

(“EIA”) and compiled by Platts public reporting service. For each of these plants, average seasonal capacity was derived and then utilized in the analysis.<sup>35</sup>

40. Generation capacities are adjusted downward by season to account for maintenance and forced outages. Forced outage rates are assumed to be applied uniformly throughout the year. PJM provides detailed reports on generating unit forced outage rates by plant technology and size. These outage rates are used as a basis for most generating units in the analyses.<sup>36</sup> Maintenance outages are based primarily on plant outages reported in FERC Form 714s. A general maintenance pattern by season is then used to derate generation capacity.
41. Fuel price data were gathered from various sources. First, for coal generating units, recent delivered coal prices were obtained from Platts BaseCase data. These data are used for all coal generating units in the analysis. The data are as of 2009 and are escalated 2.5% per annum to estimate 2011 costs. For gas and oil prices, historical monthly EIA data on delivered gas and oil prices to electric generating units by state were collected primarily from 2009. Using these data, baseline monthly gas and oil prices as of 2009 were established by state for oil and gas-fired electric generation units.
42. The baseline monthly fuel prices were averaged to correspond to the seasons used in the DPT. The seasonal baseline values were then adjusted to incorporate projected changes in fuel prices for the test year. The adjustments were based on the EIA’s projected monthly delivered oil and gas prices averaged to correspond to the DPT seasons used in the test year. For example, in instances where historical gas prices have been lower than what is expected in the future, baseline values were increased based on the percentage increase that has been projected between the base line data and the test year. These adjustments generally increase baseline values by 30-40% accounting for the fact that recent historical data were observed during a recessionary period, and that it is expected future prices will be higher.<sup>37</sup> In addition, the expected increase in fuel prices (gas and oil) is consistent with

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<sup>35</sup> Because hydroelectric plant capacities are based on actual production levels, these plants’ capacities do not need to be derated to account for planned or forced outages.

<sup>36</sup> MISO also reports forced outage rates which are comparable to PJM’s outage rates. In those instances where forced outage rates for a particular technology are not available, North American Electric Reliability Corporation Generating Availability Data System statistics are used.

<sup>37</sup> The winter adjustments are somewhat different given the seasonal differences in gas and oil prices.

the expected increase in forward market power prices that is observed when comparing 2009 power price data (primarily on-peak) to forward power market pricing data.

43. Projected nitrogen oxide (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) emissions costs were taken into account by increasing generation unit variable costs based on unit specific emissions rates. The emission rates were used along with projected SO<sub>2</sub> and NO<sub>x</sub> emissions allowance costs to establish the variable costs associated with emissions. Projected annual SO<sub>2</sub> and NO<sub>x</sub> allowance costs for 2011 were obtained from Evolution Markets (see workpapers).
44. Joint ownership and long-term contractual obligations were fully accounted for in the case of PPL and E.ON US.<sup>38</sup> For LG&E and KU, their ownership share in OVEC (approximately 179 MW) is treated as if it is part of the LG&E/KU BAA. At the same time, ownership shares that the Indiana Municipal Power Agency (12.88%) and the Illinois Municipal Electric Agency (12.12%) have in the Trimble County 1 and 2 generating units (approximately 315 MW) in the LG&E/KU BAA were treated as if part of the MISO BAA, where their owners' municipal loads are located.<sup>39</sup> KU's ownership interest in EEInc was not a factor in the analysis since the entire output of the facility is committed to a subsidiary of Ameren Corporation. Similarly, PPL's ownership shares in the Keystone, Conemaugh and Safe Harbor plants were assigned to PPL in the analysis, and the AES Ironwood plant was assigned to PPL due to PPL EnergyPlus's long-term capacity and energy tolling agreement with the plant. Neither PPL nor E.ON US has other long-term power purchase or sale agreements that would affect their control over generation resources.
45. For other suppliers, joint ownership and long-term contracts were taken into account in those instances where data were available. For example, in some instances, primary dispatch authority for a particular generating unit has been transferred from the generating unit's owner to a buyer under a long-term contract. In various instances, these data were readily available and taken into account.<sup>40</sup> Joint ownership was taken into account

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<sup>38</sup> The assumptions used in the analysis are generally consistent with how many companies account for their capacity in market-based rate filings.

<sup>39</sup> Each of these ownership share adjustments is consistent with the companies' long-term firm transmission rights to transmit power to their native loads. In addition, the simultaneous import limitation for the LG&E/KU BAA was adjusted in association with these joint ownership capacity adjustments (see below).

<sup>40</sup> Many of these adjustments are captured in the Ventyx input data.

generally by assigning each owner a share of a generating unit's capacity based on ownership percentage. This results in a small number of generating units' capacity being split among multiple owners.<sup>41</sup>

46. For the relevant geographic markets, supplier presence in the market was measured by calculating each supplier's economic capacity ("EC") and available economic capacity ("AEC") consistent with the Commission's regulations.<sup>42</sup> For each supplier, the amount of capacity that can be delivered into the destination market at a price that is no greater than 5 percent above pre-transaction price levels reported in Exhibit No. 5 was determined. Economic capacity was established by determining the amount of economical supplier capacity that can reach the market, but without accounting for native load obligations.
47. Available economic capacity was established by deducting supplier native load obligations from economic capacity where such obligations exist.<sup>43</sup> In the MISO RTO, and the EKPC and LG&E/KU BAAs,<sup>44</sup> the determination of AEC was carried out on a company by company basis consistent with conventional native load accounting in a DPT analysis.<sup>45</sup> For the OVEC BAA, there is practically no load.<sup>46</sup> The OVEC generating units are instead operated on behalf of several joint owners who have entitlements to the production. To calculate available economic supply from OVEC, each owner's economic supply and load obligations were evaluated to confirm those shares of OVEC supply that could be considered available for each time period analyzed. When an OVEC owner had AEC, that AEC was assumed capable of being exported into the LG&E/KU BAA.

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<sup>41</sup> Split ownership is also typically captured in the Ventyx input data; however, in some instances, such as with the OVEC generation resources, these adjustments were made based on publicly reported generating plant percentage entitlements.

<sup>42</sup> 18 C.F.R. § 33.3(c)(4). We note that FirstEnergy's MISO generating assets become part of PJM in the middle of the test year. Thus, FirstEnergy's MISO generating assets are only considered part of PJM during the summer season and during half of the shoulder season (i.e., FirstEnergy's MISO capacity moved to PJM is one-half of the total amount of its MISO capacity during the shoulder season).

<sup>43</sup> Company economic supply is reduced to account for native load obligations assuming lowest cost supply is used to offset the load obligation. This load reduction includes KU's wholesale sales made to municipal customers.

<sup>44</sup> In the AEC analysis, the BREC BAA was not included due to its very small amount of AEC. In addition, when generation capacity owners had load obligations that were not readily available, we excluded those owners' generation capacity when determining AEC.

<sup>45</sup> For Dayton Power and Light, there has not been a native load obligation established for 2011. FirstEnergy companies' native load obligation for 2011 in Ohio is also uncertain and has been assumed to be zero.

<sup>46</sup> See, e.g., OVEC, FERC Form No. 714 Annual Electric Balancing Area and Planning Area Report for Year Ending 2009 (filed May 14, 2010) (reporting loads that are typically less than 50 MW).

48. Because retail competition exists in many states within the PJM RTO (e.g., New Jersey, Maryland, Pennsylvania, and the District of Columbia), AEC cannot be calculated by matching generation supply and native load. Where retail competition has been introduced, generation owners' supply commitments to consumer loads occur through various contractual arrangements. For example, distribution utilities in states with retail competition are default suppliers and contract with various companies for power supply to meet the loads of customers that do not shop. At the same time, many larger commercial and industrial customers in states with retail competition obtain their power supplies from retail providers. These retail suppliers, in turn, use PJM wholesale markets and various contractual arrangements to obtain their supplies.
49. Because there are many different contractual arrangements under which consumers receive power supply in PJM, it is difficult to establish native load commitments for generation owners in most of PJM. However, using reported data on generation supply obligations, an estimate of native load obligations was developed for the PJM RTO. These native load assignments were used to calculate available economic supply in the PJM RTO.
50. To calculate AEC for American Electric Power ("AEP"), Dominion Virginia Power ("DOM"), as well as for Allegheny with respect to West Virginia, we reduced the economic capacity associated with these companies by their service territory native load estimates for each of the seasonal time periods. For these companies, this approach recognizes that the native load of these utilities continues to be primarily served by generation that is owned by either the utility, or an affiliate of the utility.<sup>47</sup>
51. Next, the AEC analysis accounts for expected load obligations for the test year associated with New Jersey and Maryland basic generation service ("BGS") auctions carried out in 2008 and 2009. For each of these years, the New Jersey Board of Public Utilities has posted the winners of its fixed-price product (which serves primarily smaller utility

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<sup>47</sup> DOM affiliates supply power to DOM since Virginia returned to a modified cost-of-service rate model in 2007. See Dominion Resources, 10-K, February 28, 2008. AEP affiliates continue to serve AEP native load obligations as evidenced by AEP's withdrawal from PJM's centralized capacity market. See Resources Designated in 2011/2012 FRR Capacity Plans as of May 21, 2008, available at <http://pjm.com/markets-and-operations/rpm/~media/markets-ops/rpm/rpm-auction-info/fr-resources-2011-2012.ashx> (listing those resources primarily owned by AEP generation affiliates that are being used to meet AEP load obligations).



customers in New Jersey<sup>48</sup>). Using the BGS-reported supplier obligations, it is possible to assign native load obligations of New Jersey utilities to those generating company resources owned by the winning suppliers in the BGS auctions, and we have done so. Similarly, we were able to establish various obligations in association with the auction data reported by Maryland utilities for their 2008-2009 auctions where long-term (greater than a year) power supplies are purchased. Thus, in the analysis, native load obligations were assigned to particular generation owners where sufficient information was available to establish an existing obligation.<sup>49</sup>

52. We used the aforementioned native load obligations for the primary analysis reported in this affidavit. However, we have run and report in our workpapers an AEC sensitivity analysis that makes additional assumptions regarding future native load obligations. To account in this AEC sensitivity analysis for native load obligations for the test year where auction data were not available, two assumptions were adopted. First, in cases where data were available on the winners of auctions held to date (New Jersey and Maryland), it is assumed that auctions which will occur over the next several months will cause generation resources to obtain an additional obligation of 15% of their affiliated utilities' future loads. That is, companies with generation resources that have historically been successful in these auctions were assumed to serve an additional portion of the future load. Second, in Pennsylvania, where the winners of auctions to serve utility loads in 2011 have not been reported, it is assumed that 25% of the supply obligation will be met by the generation resources historically associated with the load. That is, generation resources owned by affiliates of the incumbent utilities (e.g., Exelon, Allegheny and PPL) are assumed to be obligated to serve a portion of the future Pennsylvania load.<sup>50</sup> Remaining generation resources are then the available economic capacity competing to supply remaining loads.

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<sup>48</sup> See New Jersey Statewide Basic Generation Service Electricity Supply Auction, Previous Results, *available at* <http://www.bgs-auction.com/bgs.auction.prev.asp>. The New Jersey BGS auctions solicit both a fixed-price full requirements load-following product for smaller customers for a three-year term (wherein approximately one third of smaller customer load that is not shopping is procured each year) and a product that provides hourly priced energy for larger customers that are not shopping. Only the three-year, fixed-price product is included in the analysis as the larger customer product is priced based on hourly prices at the time it is consumed (i.e., AEC in the PJM market is providing this energy). Winners for the year 2010 auction had not yet been reported when we conducted our analysis.

<sup>49</sup> Delaware reports some information on its BGS suppliers; however, it is not reported with sufficient granularity to establish individual company load obligations.

<sup>50</sup> For Exelon, an additional 25% of its low cost capacity is assumed to be committed against its Illinois load.

Thus, although it is not possible to account precisely for native load obligations in this sensitivity analysis, the assumptions used are applied uniformly based primarily on historical data.

53. In all of our analyses, imports into the relevant geographic markets were limited based on simultaneous import limitations (“SILs”) that have been reported for each of the BAAs.<sup>51</sup> To determine the amount of transmission capacity assigned to each of the interconnected BAAs (see Exhibit No. 4), reported future monthly non-firm and firm available transmission capability (“ATC”), as available, were gathered from company OASIS sites.<sup>52</sup> These monthly ATC values (generally non-firm) were then averaged to obtain seasonal values for each of the relevant geographic market interconnections.
54. For each of the relevant geographic markets, the seasonal sum of the ATC for all the market interconnections was greater than the reported SILs. Thus, consistent with prior analyses accepted by the Commission, the calculated values were scaled down on a *pro rata* basis so that total BAA import capability would be limited to the seasonal SILs.<sup>53</sup> To account for LG&E/KU’s imported OVEC capacity, the SIL into LG&E/KU was reduced there; and, to account for Trimble County’s exported capacity on behalf of the Indiana Municipal Power Agency and the Illinois Municipal Electric Agency, the corresponding SIL was increased.<sup>54</sup> In addition, a small portion (62 MW) of the imports to the LG&E/KU

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<sup>51</sup> For LG&E/KU and EKPC, the SILs have been established by the Commission in recent Orders. *See Ameren Energy Generating Co., et al.*, 128 FERC ¶ 61,153, at P 18 n.18 (2009); *Southeast SIL Order* at Appendix A. For MISO and PJM, the most recently reported SILs were used in the analysis. *See* Process Document and Data, Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, MISO Regulatory and Economic Studies Department, Jan. 28, 2009, *available at* [http://www.midwestiso.org/publish/Document/279a04\\_11db4d152b9\\_-7e900a48324a?rev=5](http://www.midwestiso.org/publish/Document/279a04_11db4d152b9_-7e900a48324a?rev=5); *PJM Interconnection, LLC*, PJM SIL Study, Docket No. ER99-3151-008 (Apr. 30, 2008). Note that we did not change PJM’s reported SIL in association with FirstEnergy’s planned move to PJM. Making an adjustment to PJM’s SIL would not affect the results of the analysis given the limited amount of imports by E.ON US into the PJM region.

<sup>52</sup> For LG&E/KU, effective ATC is used in the analysis. The Southwest Power Pool (LG&E/KU’s OASIS agent) explains that effective ATC is the actual amount of available transmission capacity on any particular path taking into account both path and flowgate constraints. Thus, it represents the most accurate estimate of ATC for LG&E/KU.

<sup>53</sup> *See, e.g., PacifiCorp*, Affidavit of Rodney Frame, Docket No. EC08-82-703 at P 50 (filed Apr. 29, 2008) (where the same approach was adopted in an analysis subsequently accepted by the Commission, *see PacifiCorp*, 124 FERC ¶ 61,046 (2008)). To be conservative, the PJM to LG&E/KU effective ATC used to calculate the allocated import capacity from PJM to LG&E/KU was the largest value reported on the LG&E/KU OASIS (this corresponded to firm effective ATC).

<sup>54</sup> These adjustments are consistent with long-term firm transmission rights associated with these plants’ generating capacity.

BAA from TVA was assigned to E.ON US as if it were generation controlled by E.ON US to account for a firm transmission right held by LEM.<sup>55</sup>

55. Transmission costs were based on reported non-firm, point-to-point ceiling transmission rates. As for ancillary services, Scheduling, System and Dispatch Service and Reactive Supply and Voltage Control were included based on various tariff rates for these services. Transmission losses were assumed to be 3 percent, which increases the cost to wheel power on all wheels except the final wheel. These costs are added to suppliers' variable generation costs when evaluating EC and AEC.
56. Subject to the interconnection import limits, relevant geographic market imports were allocated *pro rata* to outside suppliers based on their economic capacities available outside of the relevant geographic market being examined.<sup>56</sup> That is, consistent with the common approach accepted by the Commission in DPT analyses, imports were allocated to economic and available economic suppliers in proportion to the amount of supply they had available at the specified price level plus 5 percent.

## **V. Results of the Horizontal Competitive Impact Screening Analysis**

57. The results of the base case DPT analyses are presented for both the EC and AEC products in Exhibit No. 6. As would be expected, the results show that PPL's and E.ON US's lower cost generating units, which are large portions of each company's generation portfolio, are economic sources of supply at all seasonal price levels. As price levels increase, higher cost gas-fired generation becomes economic and each company's economic capacity increases. With respect to PPL, this higher cost supply is gas-fired capacity (combined cycles) and oil-fired capacity that is only occasionally economic. With respect to E.ON US, the higher cost gas-fired generation is exclusively simple-cycle combustion gas turbines. Each company's economic supply is reduced when native load obligations are taken into account. For PPL, this reduction is modest given retail competition is in place throughout the region where it primarily operates, while for E.ON US this reduction tends

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<sup>55</sup> E.ON US also has export reservations of less than 100 MW into PJM and MISO which we assumed would be used when E.ON US exports EC and AEC in the DPT analysis.

<sup>56</sup> When examining two sequential interconnects, imports are first allocated from the second-tier to first-tier interconnect based on economic supply located in the second-tier, and then imports available from the first-tier are allocated to the destination market. This methodology "squeezes" down the imports that are located furthest away from the destination market.

to be substantial in accordance with LG&E's and KU's ongoing obligation to meet their retail and full requirement customers' load in Kentucky.

58. For each of the four markets analyzed, there are no screen failures under either EC or AEC analyses. Exhibit No. 6 shows that the PJM RTO market is unconcentrated in most time periods. Since E.ON US's supply is constrained by limited import capability, a relatively small amount of its supply reaches the PJM RTO market. For both EC and AEC, the HHI changes are negligible and the screening analysis shows no adverse competitive impact.
59. With respect to the LG&E/KU BAA market, we see on Exhibit No. 6 that the EC analyses show that E.ON US is the primary supplier in the market. With or without the proposed transaction, this results in highly concentrated markets in all time periods. Exhibit No. 6 also shows that the AEC results vary given the level of LG&E/KU's native load obligation. We see unconcentrated AEC markets in four time periods and moderately concentrated markets in four time periods. In two off-peak periods, the LG&E/KU BAA AEC market is at the low end of highly concentrated due to LG&E/KU's lower native load obligation during off-peak hours.
60. The LG&E/KU BAA market results also show that PPL would, at most, be one of numerous suppliers within PJM RTO that can reach the LG&E/KU BAA. That is, in all time periods, PPL's EC or AEC importable into the LG&E/KU BAA is limited to 50 MW or less (0.1-1.1% of the market supply) given that it is one of many potential suppliers located in PJM RTO that could access transmission to the LG&E/KU BAA. Moreover, to the extent the companies were to attempt to withhold supply, any supply withheld by PPL would simply be replaced by one of the other numerous suppliers in PJM that can sell into the LG&E/KU BAA market. Thus, although the screening statistic thresholds are tighter for the LG&E/KU BAA market in some time periods, the HHI changes shown in Exhibit No. 6 result in no screen failures. Accordingly, the results of the DPT analysis show no adverse competitive impact in the LG&E/KU BAA market.
61. In the MISO RTO and EKPC BAA markets, Exhibit No. 6 shows the overlap is more limited as both PPL's and E.ON US's supply will only reach these markets as imports. Exhibit No. 6 shows that there are no screen failures in the EKPC BAA and MISO RTO markets and that PPL's and E.ON US's supply that reaches the market is small. In many

instances, the markets are unconcentrated and the majority of the HHI changes are quite small. These results show no adverse competitive impact.

62. Next, we conducted sensitivity analyses that increased and decreased all DPT price levels by 10%.<sup>57</sup> The sensitivity analyses did not result in material changes to the base case results. In those instances where DPT price levels are increased, there is typically greater economic and available economic supply from all market participants. This tends to reduce the imports of PPL and E.ON US into the various destination markets and thereby lower the HHI changes. Lower DPT price levels typically have the opposite effect; however, there continue to be no screen failures in these sensitivity analyses.
63. We also conducted an AEC sensitivity analysis where, as described above, we incorporated estimated future load obligations that are associated with both currently unreported load obligations, and those load obligations likely to arise as power supply auctions are completed by various utilities throughout the course of 2010. The results of this analysis show pre- and post-transaction HHIs that are lower than those in the base case analysis in most periods as the amount of AEC in the analysis is reduced when assuming a larger quantity of future load obligations. However, no screen failures result (see workpapers).
64. We considered First Energy's acquisition of Allegheny Power, Calpine's proposed acquisition of Conectiv Energy Holding Company, and Mirant Corporation's and RRI Energy's proposed merger. With respect to all of these proposed transactions, we observed that the primary impact is the combination of two electric generation suppliers in the PJM market. Combining these generation assets would not change the amount of electric generation supply in the PJM market (except in the winter period where we have not assumed FirstEnergy's MISO assets are yet part of PJM). There will also be no change in native load obligations as a result of the proposed transactions. Thus, the market shares that are calculated for PPL will not change (nor will those calculated for E.ON US). Thus, even though the pre- and post-transaction HHIs would change somewhat in the PJM RTO market, the HHI changes will remain the same whether or not these transactions are consummated. Because these HHI changes are far beneath screening threshold levels (see Exhibit No. 6), these proposed transactions do not affect the results of the analysis. At the

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<sup>57</sup> The results of these analyses are reported in our workpapers.

same time, results for the LG&E/KU BAA would also not change as PPL's allocated imports would not change.

65. In addition, we considered the potential impact on the DPT analysis of Duke Ohio joining PJM. This proposed addition to the PJM RTO geographic region will increase the total amount of electric generating capacity in the PJM RTO. Because the amount of supply will increase, the market shares we have calculated in our PJM RTO DPT for PPL and E.ON US decrease. Lower market shares lower the market concentration changes we have calculated. Thus, the impact of the additions of electric generation capacity is to lower the already low HHI changes calculated in our PJM RTO analysis.
66. Similarly, our analysis of the LG&E/KU BAA market can be expected to show lower post-transaction PPL market shares assuming an increased amount of PJM RTO electric generation supply. Although it may be the case that the PJM to LG&E/KU BAA import allocation would slightly change as a result of the addition of Duke Ohio to the PJM RTO, the LG&E/KU BAA has only a 138 kV interconnection to Duke Ohio through its affiliate, Duke Kentucky, which is also moving to PJM. Most of the LG&E/KU BAA's interconnections with Duke are to its Duke Indiana subsidiary, which will remain in MISO.<sup>58</sup> When "squeezing down" exports from PJM to the LG&E/KU BAA in recognition of the LG&E/KU BAA SIL, PPL's allocated share can be expected to be lower and will continue to result in only a fractional market share percentage. A lower PPL market share lowers the market concentration changes we have calculated.
67. Finally, the DPT analysis is consistent with the historical EQR sales data reported in Exhibit No. 3. In particular, the DPT analysis implies that PPL will primarily be a supplier in PJM, while E.ON US will primarily be a supplier in the LG&E/KU BAA. This is wholly consistent with the historical sales data reported in Exhibit No. 3. Moreover, in adjacent markets where PPL and E.ON US do not own generating assets, the DPT implies

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<sup>58</sup> See Press Release, Duke Energy, Duke Energy Ohio and Duke Energy Kentucky Propose Switch to PJM Regional Transmission Organization (May 20, 2010), available at <http://www.duke-energy.com/news/releases/2010052001.asp>. See also LG&E/KU 2008, FERC Form No. 714 Annual Balancing Authority Area and Planning Area Report for Year Ending 2008 (filed May 13, 2009). The Duke Kentucky 138 kV interconnection with the LG&E/KU BAA would not be expected to materially impact our LG&E/KU BAA analysis. That is, even if there were a small increase in exports to the LG&E/KU BAA as a result of this interconnection becoming part of the PJM RTO, PJM's electric generation capacity will be increasing considerably, which will lower PPL's market share.

limited sales. Historical data also confirm this, showing that neither PPL nor E.ON US are large sellers outside of their primary geographic markets (see workpapers). Thus, historical data reinforce the DPT analysis' conclusion that the proposed transaction will have no adverse competitive impact.

## **VI. Assessment of Vertical Market Power Competitive Impacts**

68. Vertical market power concerns can arise in the context of a merger or an acquisition if the combined companies have an increased ability to foreclose or impede entry of competitors, or have an increased incentive to raise competitors' costs (e.g., by raising the cost of upstream inputs). The Commission protects against vertical market power by ensuring that competitors have open access to the electric transmission system; the combined companies will not have increased control of generation sites; and the combined companies will not have an increased ability to raise input costs to competitors.

### **A. Transmission**

69. With respect to this transaction, there is very little analysis required to demonstrate that there are no vertical market power concerns. First, PPL Electric's and LG&E/KU's electric transmission systems are operated under OATTs. In the case of PPL Electric, its transmission system is operated by PJM and access is administered by PJM. In the case of LG&E/KU, their electric transmission systems are operated under a joint OATT administered by SPP. Thus, access and use of LG&E/KU's transmission system cannot realistically be impeded. The companies, therefore, cannot prevent access to their electric transmission systems.

### **B. Generation Sites**

70. Second, there is no prospect that the companies could erect barriers to entry through control of generation sites. PPL and E.ON US own or control only a few of the sites available for the development of new generation capacity in the region where their electric assets are located, and they do not have the ability to prevent the siting of new generation facilities. In fact, competitive entry has occurred at numerous locations in the PJM region during the

past decade, with many facilities continuing to pursue interconnection.<sup>59</sup> Similarly, competitive entry has occurred in Kentucky with the addition of the Bluegrass electric generation plant in 2002.

### C. Fuel Inputs

71. Finally, when considering the ability of a transaction to affect competitors' input costs, the Commission is concerned when market power can be exercised in both upstream fuel markets and downstream electric markets.<sup>60</sup> The PJM electricity market is generally unconcentrated. This eliminates any vertical market power concern that might be related to access to natural gas transportation to the PJM market. In Kentucky, that fact that LG&E and KU are the primary owners of electric generating capacity leads to a highly concentrated energy market during some time periods. However, there are no barriers to entry (see above) and, with regard to access to natural gas supplies, PPL and E.ON US do not control a meaningful share of the relevant markets, and those markets are highly fragmented. Moreover, PPL and E.ON US's gas transportation rights do not materially overlap.<sup>61</sup> As the analysis presented below shows, LG&E's regulated retail natural gas distribution system and E.ON US natural gas transportation rights are negligible compared to the pipeline transportation capacity available in Kentucky, and the market for natural gas pipeline transportation upstream of Kentucky is unconcentrated. There is no plausible scenario in which the proposed transaction would affect competitors' costs.
72. Because the downstream electricity market in the LG&E/KU BAA is highly concentrated in some time periods, this analysis focuses on whether there exists the ability to vertically

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<sup>59</sup> See, e.g., PJM, Generation Queue: Active, <http://www.pjm.com/planning/generation-interconnection/generation-queue-active.aspx> (where PJM reports generation interconnection requests currently under review).

<sup>60</sup> The Commission has stated that it is necessary for both upstream and downstream markets to be highly concentrated in order for a vertical market power concern to exist. Order No. 642, FERC Stats. & Regs. ¶ 31,111, at p. 31,911.

<sup>61</sup> There is no need to analyze the natural gas commodity market as the production and sale of natural gas has been found to take place in a highly competitive market with numerous competitors and low barriers to entry. See, e.g., *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 436, 50 Fed. Reg. 42,408 (Oct. 18, 1985), FERC Stats. & Regs. ¶ 30,665, at p. 31,473 (1985) ("Around the commodity has evolved a highly competitive and rapidly growing spot market, with a thriving infrastructure of brokers and marketers, electronic information exchange services, and trade publications tracking price and market movements. Moreover, the Congressional decision in the Natural Gas Policy Act ("NGPA") to remove both price (NGPA section 121) and non-price (NGPA section 601(a)(1)) regulation over 'first sales' of most natural gas -- whether in interstate or intrastate commerce -- has meant that these supplies of gas can now generally be sold by producers or marketers without the need for prior regulatory approval of market entry, market exit or price.").



foreclose future access to fuel supply for natural gas-fired or coal-fired generation capacity in Kentucky.<sup>62</sup> As we explain below, the proposed acquisition does not result in any material overlapping rights to fuel transportation services.<sup>63</sup> In addition, in Kentucky, where LG&E/KU hold a small amount of gas transportation rights associated primarily with serving LG&E's retail gas customers, E.ON US's transportation rights are very small relative to the amount of transportation capacity that exists at the Kentucky border. Finally, the upstream gas transportation market is unconcentrated. Nevertheless, in the analysis below, we examine interstate transportation markets and local distribution company ("LDC") services.

#### 1. Long Haul Natural Gas Transportation

73. The transportation of natural gas from the areas of production to Kentucky where that gas can be used to fuel natural gas-fired generation is performed by long-haul interstate pipelines. These are regulated by the Commission. Control of these pipelines might raise concerns about the ability of the merging parties to raise rivals' costs by limiting competitors; or potential competitors' access to these facilities. However, straightforward analysis of interstate natural gas pipeline transportation shows that Kentucky has access to numerous interstate pipeline systems which provide access to upstream natural gas producing regions, and that neither PPL nor E.ON US has significant transportation rights on these pipeline systems.
74. For example, there are at least 7 interstate pipelines serving the Commonwealth of Kentucky, representing an aggregate capacity of almost 13 Bcf per day at the state border (see Exhibit No. 7). By comparison, recent levels of natural gas used for electric generation in the state represent only 23 MMcf/d (2009 data), or only 0.2% of this pipeline total.<sup>64</sup> A new 300 MW natural-gas-fired generation facility with a heat rate of 7.5 MMBTU/MWh requires only approximately 54 MMcf/d of natural gas at 100% utilization,

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<sup>62</sup> We note that existing electric generating capacity using natural gas represents a negligible fraction of the energy generated within Kentucky. According to the 2008 EIA data, natural gas fueled 1% of the electricity generated in the state. See EIA, Electric Power Annual 2008-State Databases, [http://www.eia.doe.gov/cneaf/electricity/epa/epa\\_sprdshts.html](http://www.eia.doe.gov/cneaf/electricity/epa/epa_sprdshts.html).

<sup>63</sup> PPL holds a negligible quantity of transportation rights on one interstate gas pipeline. However, it is a small fraction of a percent of the total and is inconsequential in the analysis.

<sup>64</sup> See EIA, Natural Gas Consumption by End Use, [http://www.eia.doe.gov/dnav/ng/ng\\_cons\\_sum\\_dcu\\_SKY\\_a.htm](http://www.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_SKY_a.htm) (8,401 MMcf (09)/365 equals 23 MMcf/d).

or approximately 0.4% of the total pipeline capacity available in the state. Thus, there is a significant amount of interstate natural gas pipeline capacity available in Kentucky.

75. Importantly, none of the interstate pipeline facilities are owned or operated by PPL or E.ON US.<sup>65</sup> As such, there is no direct way that, as operators, PPL or E.ON US could foreclose prospective competitors' access to natural gas supplies or raise their costs. Interstate transportation capacity such as that listed in Exhibit No. 7 is typically sold to third party shippers under long-term firm transportation contracts. As such, it is the holders of these capacity contracts that actually control how and when this capacity is used. In theory, competitive concerns might be raised if there is concentration in these holdings of pipeline capacity contracts.<sup>66</sup>
76. Examination of the firm shippers that have capacity on interstate natural gas pipelines serving Kentucky shows that neither E.ON US nor PPL has significant transportation rights on these systems. First, PPL holds a negligible quantity of transportation with delivery rights in Kentucky (0.02% of the interstate pipeline capacity at the Kentucky border).<sup>67</sup> Thus, there is no meaningful overlap which results from the proposed acquisition. Next, with respect to E.ON US, Exhibit No. 8 shows its holdings of natural gas pipeline capacity (combined with PPL's negligible quantity) represent only 1.9 to 2.2% of the total long haul pipeline capacity in Kentucky.<sup>68</sup> These holdings are very small and do not create any concern regarding the potential for unilateral withholding of natural gas transportation.
77. Finally, in theory, there could be concern that a concentrated upstream (transportation) market may facilitate market participants conspiring together to deny service to rivals. Accordingly, we have also examined the level of concentration in the long haul

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<sup>65</sup> We exclude the ten mile Doe Run interstate spur line owned by LG&E.

<sup>66</sup> Any concern regarding the withholding of pipeline transportation capacity, especially in the short term, is largely mitigated by regulatory requirements that interstate pipelines make available any capacity that is not utilized by contract holders to other shippers on an interruptible basis. As such, contract holders do not have a unilateral ability to "hoard" pipeline capacity, thus making it unavailable to others. *See Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637-A, FERC Stats. & Regs. ¶ 31,099, at 31,564 (May 19, 2000).

<sup>67</sup> PPL has other long haul pipeline capacity holdings; however, these holdings are overwhelmingly on pipelines that do not provide supply options to Kentucky.

<sup>68</sup> This capacity is largely tied to LG&E's role as an LDC provider of natural gas distribution services to end users in the Louisville area. LG&E uses this capacity plus additional storage rights to meet the peak winter needs of its customers.

transportation market by analyzing and calculating concentration statistics based on capacity holdings of all pipeline shippers. The methodology we employ here captures the capacity holdings associated with all firm contracts held by shippers on the 7 pipelines listed on Exhibit No. 7. The data are reported quarterly by the pipelines themselves to the FERC on Form 549B.<sup>69</sup> We have aggregated capacity rights by holding company in order to arrive at combined capacity rights holdings of affiliated companies.

78. The results of this calculation are shown on Exhibit No. 9. Note that the largest holder of the long haul contracts deliverable to Kentucky holds only a 7.6% share of this capacity, with the next largest holdings at a much lower level. Exhibit No. 9 also shows that the HHI for this market is less than 300, indicating that this transportation market is highly fragmented and not conducive to collusive conduct.

## 2. Short Haul Natural Gas Transportation

79. Insofar as LG&E is a provider of LDC distribution services, there could, in theory, be concerns that E.ON US could potentially prevent the movement of gas to rivals over the “last mile” of a distribution pipeline. This concern is unfounded in this situation: LG&E does not provide any distribution services to any competing electric generation facilities. In addition, new electric generating facilities would be expected to bypass service of any existing local distribution system, opting to take service directly from larger, high capacity interstate lines in order to get high volume, high pressure service without having to pay multiple tariffs. There is no basis for concluding that the proposed transaction portends harm to competition in the provision of upstream short haul gas transportation.

## 3. Rail Transportation

80. LG&E and KU own and/or lease rail cars. However, these rail cars are used exclusively to ship coal to their own electric generating facilities. Although PPL and its affiliates own rail cars, they are also used exclusively to ship coal to their own generating facilities. Therefore, the control of these rail cars does not raise any vertical market power issues.

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<sup>69</sup> For purposes of this analysis, we have only included contracted capacity with receipt points upstream of Kentucky and delivery points in or downstream of Kentucky. Given the flexibility in nominating actual delivery points as required by the FERC regulatory regime, all contracts that meet these criteria are potential sources of gas delivered into Kentucky, either directly or through the utilization of capacity release whereby capacity holders may sell their capacity to third parties on a long or short-term basis.

81. This concludes our affidavit.

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

PPL Corporation  
E.ON U.S. LLC

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Docket No. EC10-\_\_\_\_-000

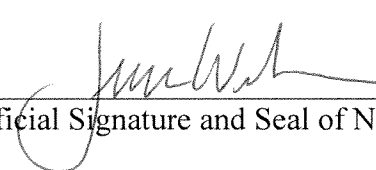
AFFIDAVIT OF A. JOSEPH CAVICCHI AND JOSEPH P. KALT

I, Joseph P. Kalt, having first been duly sworn under oath, depose and state that the statements contained in the foregoing testimony in this proceeding are true and correct to the best of my knowledge, information and belief.

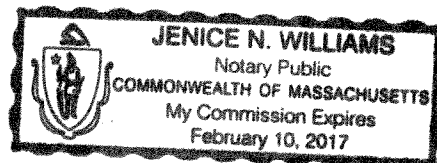
Executed on this 25 day of June, 2010.

  
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Joseph P. Kalt

On this 25<sup>th</sup> day of June, 2010, before me, the undersigned Notary Public, personally appeared Joseph P. Kalt, proved to me through satisfactory evidence of identification, which was/were Driver's license, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to be that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

  
\_\_\_\_\_  
Official Signature and Seal of Notary Public

My Commission Expires 2/10/2017.



UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

PPL Corporation  
E.ON U.S. LLC

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Docket No. EC10-\_\_\_\_-000

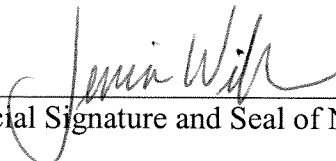
AFFIDAVIT OF A. JOSEPH CAVICCHI AND JOSEPH P. KALT

I, A. Joseph Cavicchi, having first been duly sworn under oath, depose and state that the statements contained in the foregoing testimony in this proceeding are true and correct to the best of my knowledge, information and belief.

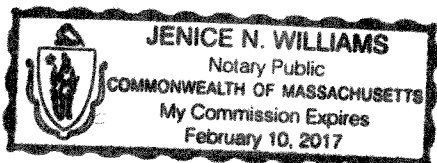
Executed on this 25 day of June, 2010.

  
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A. Joseph Cavicchi

On this 25<sup>th</sup> day of June, 2010, before me, the undersigned Notary Public, personally appeared A. Joseph Cavicchi, proved to me through satisfactory evidence of identification, which was/were Driver's License, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to be that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

  
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Official Signature and Seal of Notary Public

My Commission Expires 2/10/17.



# PPL SUMMER AND WINTER ELECTRIC GENERATING CAPACITIES (2011)

Plant Name	Fuel Type	Summer Capacity (MW)	Winter Capacity (MW)
Susquehanna 1-2 <sup>(1)</sup>	Uranium	2,259	2,259
Montour 1-2	Coal	1,527	1,512
Brunner Island 1-3 <sup>(3)</sup>	Coal	1,418	1,439
Conemaugh 1-2	Coal	276	230
Keystone 1-2	Coal	210	175
Lower Mount Bethel	Natural Gas	582	582
University Park North 1-12	Natural Gas	450	450
Martins Creek 3-4 <sup>(2)</sup>	No. 6 Fuel Oil	1,700	1,700
Misc. Combustion Turbines	No. 2 Fuel Oil	353	453
Misc. Internal Combustion	No. 2 Fuel Oil	11	11
Safe Harbor 1-12, 41-42 <sup>(1)</sup>	Water	138	138
Holtwood 1-11, 13	Water	109	104
Wallenpaupack 1-2	Water	44	44
Keystone (Landfill) 1-7 IC <sup>(4)</sup>	Landfill Gas	5	5
AES Ironwood 1 <sup>(5)</sup>	Natural Gas	640	625
Total		9,723	9,728

Notes:

(1) The capacity of Safe Harbor represents PPL Holtwood, LLC's 33% ownership interest. The capacity of Susquehanna has been increased to 2,510 MW to account for an uprate and reduced by 10% to account for the Allegheny Electric Cooperative's ownership interest.

(2) Martins Creek Unit 4 has been increased 30 MW to account for a planned uprate.

(3) Brunner Island had been decreased 30 MW to account for the addition of a scrubber.

(4) PPL Electric purchases the power from these producers under long term contracts.

(5) PPL purchases the capacity and energy from AES Ironwood through a long-term tolling agreement.

## E.ON SUMMER AND WINTER ELECTRIC GENERATING CAPACITIES (2011)

Plant Name	Fuel Type	Summer Capacity (MW)	Winter Capacity (MW)
Ghent 1-4	Coal	1,918	1,897
Mill Creek 1-4	Coal	1,472	1,491
Trimble County 2 <sup>(1)</sup>	Coal	589	589
Trimble County 1 <sup>(1)</sup>	Coal	383	386
Brown 1-3	Coal	697	704
Cane Run 4-6	Coal	563	563
Green River 3-4	Coal	163	173
Clifty Creek 1-6 <sup>(2)</sup>	Coal	97	100
Kyger Creek 1-5 <sup>(2)</sup>	Coal	80	83
Tyrone 3	Coal	71	73
Trimble County 5-10 GT	Natural Gas	960	1,080
Brown 5-11 GT	Natural Gas	947	1,039
Cane Run 11 GT	Natural Gas	14	14
Paddy's Run 13	Natural Gas	158	175
Paddy's Run 11-12	Natural Gas	35	41
Zorn 1	Natural Gas	14	16
Haefling 1-3	No. 2 Fuel Oil	36	42
Ohio Falls 1-8	Water	52	34
Dix Dam 1-3	Water	24	24
<b>Total</b>		<b>8,273</b>	<b>8,524</b>

Notes:

(1) E.ON reported capacity for Trimble County 1 and 2 represents its 75% ownership share.

(2) E.ON reported capacity for Clifty Creek and Kyger Creek represents its 8.13% ownership share.



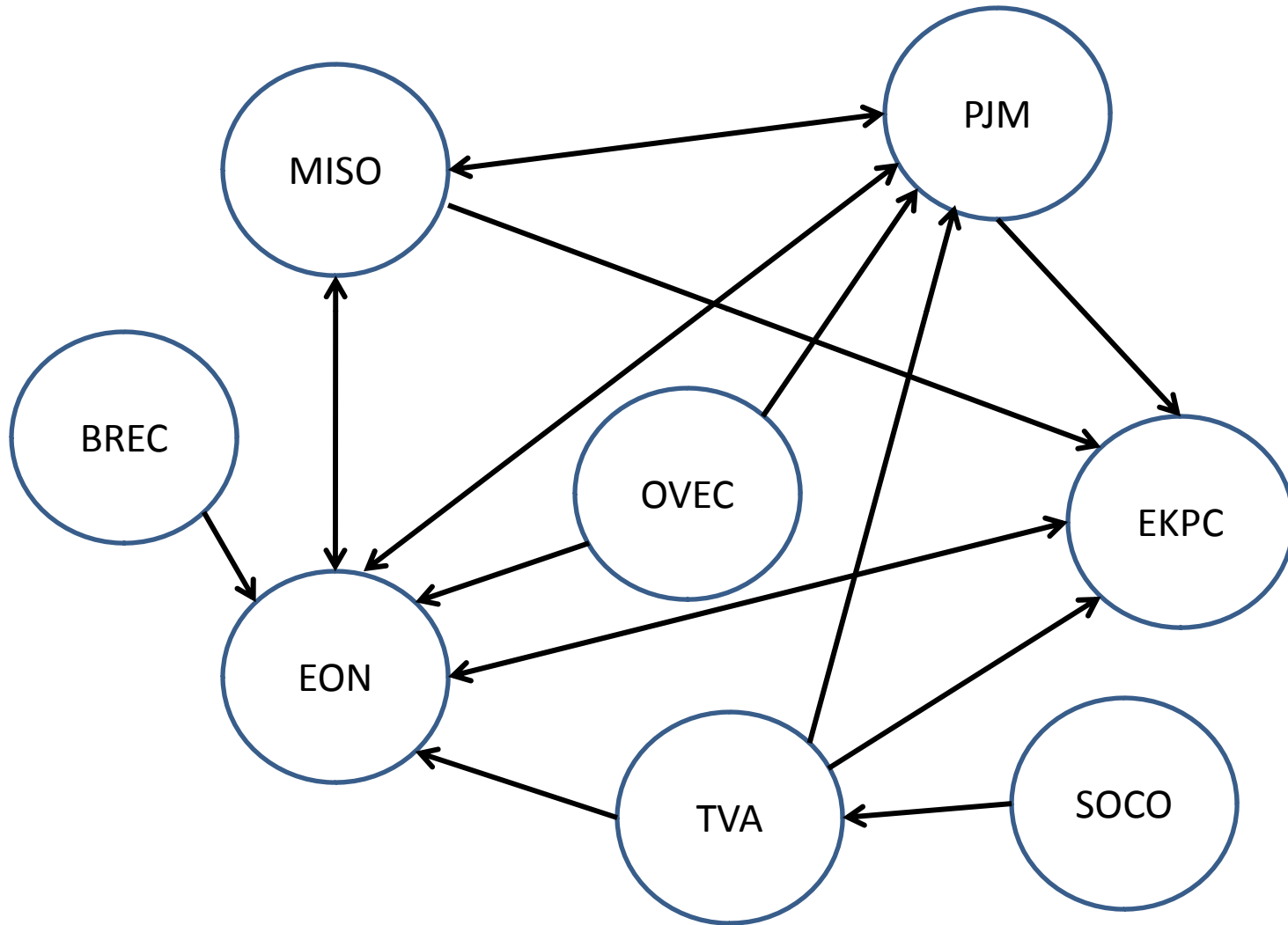
# PPL/E.ON HISTORICAL QUARTERLY WHOLESALE TRANSACTIONS 2008-2009

Year	Quarter	Balancing Authority Area	E.ON (MWhs)	PPL (MWhs)
2008	Quarter 1	PJM	206,544	40,088,819
		MISO	451,865	303,105
		LGEE	549,567	0
	Quarter 2	PJM	297,359	29,754,963
		MISO	264,647	1,278,477
		LGEE		0
	Quarter 3	PJM	398,003	33,498,815
		MISO	179,113	1,163,218
		LGEE	566,385	0
	Quarter 4	PJM	708,396	19,487,743
		MISO	551,960	1,464,434
		LGEE	470,411	0
2009	Quarter 1	PJM	244,235	24,921,600
		MISO	151,707	344,923
		LGEE	484,867	0
	Quarter 2	PJM	146,644	21,437,717
		MISO	49,819	812,590
		LGEE	418,424	0
	Quarter 3	PJM	9,093	25,452,288
		MISO	18,827	816,930
		LGEE	507,865	0
	Quarter 4	PJM	137,145	24,418,888
		MISO	21,214	813,591
		LGEE	446,875	0

## Notes:

- 1) Represents energy transactions reported by PPL and E.ON to these balancing authority areas.
- 2) E.ON represents the combined sales of LG&E Energy Marketing Inc. and Louisville Gas and Electric Company/Kentucky Utilities Company. LG&E Energy Marketing Inc. ceased making energy sales after the spring of 2009.
- 3) PPL represents the sales of PPL Energy Plus.
- 4) Data have not been analyzed to account for potential double counting of sales transactions.

# DPT NETWORK DIAGRAM



Note: EEI BAA is included in TVA.

## DPT PRICE LEVELS 2011 (\$/MWh)

Exhibit No. 5

Period	E.ON DPT PRICES 2011	MISO AND EKPC DPT PRICES 2011	PJM DPT PRICES 2011
Shoulder2	55	55	70
Shoulder3	39	38	46
Shoulder4	25	25	36
Summer1	300	300	300
Summer2	62	61	78
Summer3	44	43	56
Summer4	26	26	38
Winter2	58	56	73
Winter3	39	39	48
Winter4	29	29	42

# PPL-E.ON PJM RTO MARKET Economic Capacity

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	734	772	840	923	861	965	1,039	807	888	968
Post-Merger HHI	737	775	844	927	865	971	1,045	809	891	972
HHI Change	3	3	3	4	5	6	6	2	3	3
PPL Capacity (MW)	8,815	6,949	6,531	5,970	6,914	6,493	5,341	6,853	6,434	5,885
E.ON Capacity (MW)	412	412	429	429	559	550	550	344	339	339
Market Size (MW)	165,135	149,872	132,860	112,153	129,543	110,227	100,287	140,340	122,881	108,398
PPL Market Share (%)	5.3	4.6	4.9	5.3	5.3	5.9	5.3	4.9	5.2	5.4
E.ON Market Share (%)	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.2	0.3	0.3
Combined Post-Transaction Capacity (MW)	9,227	7,361	6,960	6,398	7,473	7,043	5,891	7,197	6,773	6,224
Combined Post-Transaction Market Share (%)	6	5	5	6	6	6	6	5	6	6

**Notes:**

Assumes test year 12/2010 - 11/2011.

# PPL-E.ON E.ON MARKET Economic Capacity

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	6,582	7,080	6,570	6,500	3,377	3,382	3,350	4,626	4,627	4,533
Post-Merger HHI	6,593	7,093	6,586	6,515	3,419	3,425	3,395	4,657	4,660	4,567
HHI Change	11	13	16	16	42	43	45	32	33	34
PPL Capacity (MW)	6	6	7	7	36	36	37	19	20	20
E.ON Capacity (MW)	7,518	6,876	5,523	5,368	5,510	5,510	5,446	5,445	5,445	5,291
Market Size (MW)	9,300	8,188	6,835	6,679	9,611	9,611	9,547	8,071	8,071	7,917
PPL Market Share (%)	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.2	0.2	0.3
E.ON Market Share (%)	80.8	84.0	80.8	80.4	57.3	57.3	57.0	67.5	67.5	66.8
Combined Post-Transaction Capacity (MW)	7,525	6,882	5,530	5,374	5,546	5,547	5,483	5,464	5,465	5,311
Combined Post-Transaction Market Share (%)	81	84	81	80	58	58	57	68	68	67

**Notes:**

Assumes test year 12/2010 - 11/2011.

# PPL-E.ON EKPC Market Economic Capacity

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	4,580	3,461	3,468	3,263	3,899	3,906	3,691	3,674	3,680	2,872
Post-Merger HHI	4,588	3,475	3,483	3,279	3,918	3,924	3,712	3,694	3,699	2,901
HHI Change	8	14	14	16	19	18	21	20	19	29
PPL Capacity (MW)	35	35	35	36	25	24	25	29	28	31
E.ON Capacity (MW)	181	190	187	184	307	306	304	295	294	284
Market Size (MW)	3,900	3,030	3,030	2,895	2,855	2,855	2,721	2,912	2,912	2,436
PPL Market Share (%)	0.9	1.1	1.1	1.2	0.9	0.9	0.9	1.0	0.9	1.3
E.ON Market Share (%)	4.6	6.3	6.2	6.3	10.7	10.7	11.2	10.1	10.1	11.6
Combined Post-Transaction Capacity (MW)	216	225	221	219	332	330	329	324	322	314
Combined Post-Transaction Market Share (%)	6	7	7	8	12	12	12	11	11	13

**Notes:**

Assumes test year 12/2010 - 11/2011.

# PPL-E.ON MISO Market Economic Capacity

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	472	439	454	464	438	459	470	439	469	469
Post-Merger HHI	472	439	454	464	438	459	470	439	469	469
HHI Change	0	0	0	0	0	0	0	0	0	0
PPL Capacity (MW)	1,090	1,021	1,119	1,104	1,336	1,265	1,296	902	924	1,006
E.ON Capacity (MW)	119	123	122	121	70	70	70	83	83	82
Market Size (MW)	132,563	114,708	107,472	91,880	121,709	106,738	103,128	112,755	100,171	92,133
PPL Market Share (%)	0.8	0.9	1.0	1.2	1.1	1.2	1.3	0.8	0.9	1.1
E.ON Market Share (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Combined Post-Transaction Capacity (MW)	1,209	1,144	1,241	1,225	1,406	1,335	1,367	985	1,007	1,089
Combined Post-Transaction Market Share (%)	1	1	1	1	1	1	1	1	1	1

**Notes:**

Assumes test year 12/2010 - 11/2011.

**PPL-E.ON**  
**PJM RTO MARKET**  
**Available Economic Capacity**

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	822	815	868	974	865	985	1,100	773	847	963
Post-Merger HHI	823	818	868	980	874	994	1,110	777	851	968
HHI Change	1	3	0	6	9	9	10	4	4	5
PPL Capacity (MW)	8,064	6,190	5,801	5,382	5,547	5,190	4,183	5,983	5,598	5,175
E.ON Capacity (MW)	81	243	0	355	554	453	511	326	282	310
Market Size (MW)	110,738	101,701	91,444	80,851	84,230	71,898	66,738	98,200	85,811	77,614
PPL Market Share (%)	7.3	6.1	6.3	6.7	6.6	7.2	6.3	6.1	6.5	6.7
E.ON Market Share (%)	0.1	0.2	0.0	0.4	0.7	0.6	0.8	0.3	0.3	0.4
Combined Post-Transaction Capacity (MW)	8,145	6,432	5,801	5,737	6,101	5,643	4,693	6,309	5,880	5,485
Combined Post-Transaction Market Share (%)	7	6	6	7	7	8	7	6	7	7

**Notes:**

Assumes test year 12/2010 - 11/2011.



**PPL-E.ON  
E.ON MARKET  
Available Economic Capacity**

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	1,153	1,177	556	2,439	563	836	1,066	986	1,326	1,930
Post-Merger HHI	1,171	1,211	558	2,473	582	875	1,114	1,027	1,373	1,975
HHI Change	18	34	2	34	19	39	47	41	47	45
PPL Capacity (MW)	9	9	9	8	48	49	47	26	27	23
E.ON Capacity (MW)	348	463	12	1,038	377	984	1,480	873	1,182	1,757
Market Size (MW)	1,875	1,547	1,128	2,196	4,317	4,943	5,457	3,345	3,665	4,264
PPL Market Share (%)	0.5	0.6	0.8	0.4	1.1	1.0	0.9	0.8	0.7	0.5
E.ON Market Share (%)	18.6	29.9	1.0	47.3	8.7	19.9	27.1	26.1	32.3	41.2
Combined Post-Transaction Capacity (MW)	357	472	21	1,046	425	1,033	1,528	899	1,209	1,780
Combined Post-Transaction Market Share (%)	19	30	2	48	10	21	28	27	33	42

**Notes:**

Assumes test year 12/2010 - 11/2011.

**PPL-E.ON**  
**EKPC MARKET**  
**Available Economic Capacity**

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	536	490	562	728	721	768	795	605	974	739
Post-Merger HHI	549	543	562	757	741	831	882	682	1,035	819
HHI Change	13	53	0	29	19	63	87	77	61	80
PPL Capacity (MW)	49	48	46	44	33	31	31	38	36	38
E.ON Capacity (MW)	28	85	0	71	35	122	168	164	190	142
Market Size (MW)	1,456	1,243	1,298	1,470	1,089	1,089	1,089	1,278	1,503	1,160
PPL Market Share (%)	3.4	3.9	3.6	3.0	3.0	2.8	2.8	3.0	2.4	3.3
E.ON Market Share (%)	2.0	6.8	0.0	4.8	3.2	11.2	15.5	12.8	12.6	12.2
Combined Post-Transaction Capacity (MW)	78	133	46	115	68	152	199	202	226	179
Combined Post-Transaction Market Share (%)	5	11	4	8	6	14	18	16	15	15

**Notes:**

Assumes test year 12/2010 - 11/2011.

**PPL-E.ON  
MISO MARKET  
Available Economic Capacity**

	Summer				Winter			Shoulder		
	Absolute Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak	Super Peak	On Peak	Off Peak
Pre-Merger HHI	485	488	528	596	505	669	629	483	563	589
Post-Merger HHI	485	489	528	597	505	670	630	484	564	590
HHI Change	1	1	0	1	1	1	1	1	1	1
PPL Capacity (MW)	1,526	1,417	1,508	1,369	1,764	1,597	1,585	1,182	1,217	1,245
E.ON Capacity (MW)	65	99	0	90	60	67	68	77	78	74
Market Size (MW)	60,857	56,883	53,981	48,446	61,142	50,191	51,841	59,562	50,936	48,335
PPL Market Share (%)	2.5	2.5	2.8	2.8	2.9	3.2	3.1	2.0	2.4	2.6
E.ON Market Share (%)	0.1	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.2	0.2
Combined Post-Transaction Capacity (MW)	1,591	1,516	1,508	1,459	1,824	1,664	1,653	1,259	1,295	1,320
Combined Post-Transaction Market Share (%)	3	3	3	3	3	3	3	2	3	3

**Notes:**

Assumes test year 12/2010 - 11/2011.

## NATURAL GAS TRANSPORTATION PIPELINES CAPACITY SERVING KENTUCKY

Pipeline	Capacity @ KY Border (MMcf/d)
ANR Pipeline Co.	1,398
Columbia Gulf Trans. Co.	2,317
Midwestern Gas Trans. Co.	1,015
Tennessee Gas Pipeline Co.	2,771
Texas Eastern Trans. Co.	2,200
Texas Gas trans Co.	1,660
Trunkline Gas Co.	1,570
Total Capacity	12,931

Note: Represents data available for end of year 2008, pipelines with capacity of < 50 mmcf/d omitted

## E.ON AND PPL HOLDINGS OF NATURAL GAS TRANSPORTATION CAPACITY SERVING KENTUCKY

<u>Company</u>	<u>Pipeline</u>	<u>Service</u>	<u>Capacity (mmbtu/d)</u>		<u>Dedicated Use</u>
			<u>Winter</u>	<u>Summer</u>	
E.ON	Texas Gas	NNS	184,900	60,000	LDC
		FT	10,000	10,000	LDC
		STF	100	18,000	LDC
		SNS <sup>1</sup>	-	151,000	Generation
E.ON	Tennessee Gas Pipeline Co.	FT-A	51,000	51,000	LDC
PPL	Columbia Gulf	FTS-1	<u>3,676</u>	<u>3,676</u>	Generation
Total Capacity (mmbtu/d)			249,676	293,676	
Total capacity (mmcf/d) <sup>2</sup>			243	286	
Share of Pipeline Capacity Serving KY			1.9%	2.2%	

<sup>1</sup> SNS contract totals 59,000 for Apr, May & Oct 2010; 151,000 for Jun-Sep 2010, Apr-Oct 2011 & 2012

<sup>2</sup> Conversion factor: 1 mcf = 1028 mmbtu

## MARKET CONCENTRATION IN UPSTREAM TRANSPORTATION SERVICES

Customer Holding Co	Daily Transport Quantity (Dth)	Total Transport Quantity (Dth)	Percent Share	HHI Contribution
NiSource Inc	778,437	10,295,443	7.56	57.17
National Grid Plc	764,493	10,295,443	7.43	55.14
Proliance Energy LLC	685,026	10,295,443	6.65	44.27
Public Service Enterprise Group Inc	477,447	10,295,443	4.64	21.51
UGI Corp	369,017	10,295,443	3.58	12.85
Iberdrola SA	300,773	10,295,443	2.92	8.53
Atmos Energy Corp	296,568	10,295,443	2.88	8.30
E.ON Group & PPL Corp	293,676	10,295,443	2.85	8.14
Piedmont Natural Gas Co Inc	281,382	10,295,443	2.73	7.47
WGL Holdings Inc	281,258	10,295,443	2.73	7.46
CMS Energy Corp	240,000	10,295,443	2.33	5.43
Devon Energy Corp	180,000	10,295,443	1.75	3.06
Dominion Resources Inc	179,278	10,295,443	1.74	3.03
Constellation Energy Group	179,136	10,295,443	1.74	3.03
Consolidated Edison Inc	175,099	10,295,443	1.70	2.89
Macquarie Cook Energy LLC	163,875	10,295,443	1.59	2.53
National Fuel Gas Co	163,000	10,295,443	1.58	2.51
New Jersey Resources Corp	160,737	10,295,443	1.56	2.44
AGL Resources Inc	151,941	10,295,443	1.48	2.18
RRI Energy Inc	150,000	10,295,443	1.46	2.12
NSTAR	131,518	10,295,443	1.28	1.63
Exelon Corp	125,286	10,295,443	1.22	1.48
Tenaska Inc	125,020	10,295,443	1.21	1.47
Laclede Group (The)	125,000	10,295,443	1.21	1.47
All Others (< 1%)	3,517,476	10,295,443	34.17	18.17
<b>Total:</b>	<b>10,295,443</b>		<b>100</b>	<b>284</b>



## **CURRICULUM VITAE**

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## **PROFESSIONAL POSITIONS**

### **JOHN F. KENNEDY SCHOOL OF GOVERNMENT, HARVARD UNIVERSITY, CAMBRIDGE, MA**

*Ford Foundation Professor of International Political Economy*, 1992-present

Areas of specialization include Industrial Organization, Economics of Antitrust and Regulation, Natural Resource Economics, Public Choice and Political Economy, Economic Development, Microeconomic Theory.

*Co-Director*, The Harvard Project on American Indian Economic Development, 1987-present

*Faculty Chair*, Harvard University Native American Program, 2000-2006

*Chair*, Economics and Quantitative Methods Cluster, 1995-2000

*Professor of Political Economy*, 1986-1992

*Faculty Chair and Academic Dean for Research*, 1992-1994

*Chairman*, Environment and Natural Resources Program, Center for Science and International Affairs, 1990-1994

*Chairman of Degree Programs*, 1990-1992

*Chairman of Ph.D. Programs*, 1989-1990

*Assistant Director for Natural Resources*, Energy and Environmental Policy Center, 1985-1990

*Co-Director*, Harvard Study on the Future of Natural Gas Policy (with Frank C. Schuller), Energy and Environmental Policy Center, John F. Kennedy School of Government, 1984-1986

### **Department of Economics, Harvard University, Cambridge, MA**

*Associate Professor of Economics*, 1983-1986

*Assistant Professor of Economics*, 1980-1983

*Instructor in Economics*, 1978-1980

Taught Economics of Antitrust and Regulation, Intermediate Microeconomics, and Principles of Economics.

**THE UNIVERSITY OF ARIZONA, TUCSON, AZ**

*Visiting Professor, Eller College of Management, 2005-present*

*Faculty Chair for Nation Building Programs, Native Nations Institute for Leadership, Management, and Policy, Udall Center for Studies in Public Policy, 2005-present*

*Visiting Professor, American Indian Studies Program, 2005-2006*

**COMPASS LEXECON**

**Senior Economist, 2003-present (and since 1983 with predecessor enterprises)**

**President's Council of Economic Advisers, Washington DC**

*Junior Staff Economist, 1974-1975*

Analyzed federal energy, environmental, transportation, and tax policies.

**EDUCATION**

University of California, Los Angeles, Ph.D. in Economics, 1980; M.A. in Economics, 1977

Doctoral Dissertation: *Federal Control of Petroleum Prices: A Case Study of the Theory of Regulation*

Stanford University, Stanford, CA, B.A. in Economics (Honors), 1973

**PUBLICATIONS AND RESEARCH: BOOKS AND MONOGRAPHS**

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“Public Choice, Culture and American Indian Economic Development” (with Stephen E. Cornell), *Project Report*, Harvard Project on American Indian Economic Development, July 1988.

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“Television Industry Self-Regulation: Protecting Children from Competition in Broadcasting” (with George J. Holder), Harvard Institute of Economic Research, Discussion Paper No. 896, April 1982.

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## **OTHER PUBLICATIONS AND LEGISLATIVE TESTIMONY**

Statement to U.S. House of Representatives Committee on Appropriations, Subcommittee on Interior, Environment, and Related Agencies, *The State of Indian America*, March 13, 2007.

Statement to U.S. Senate Committee on Indian Affairs, *Lessons in Economic Development*, Hearings Regarding International Lessons in Economic Development, September 12, 2002 (hearings cancelled September 11, 2002); published in U.S. Senate Committee on Indian Affairs, *Forum on Establishing a Tribally Owned Development Corporation*, July 20, 2004.

“Institution Building: Organizing for Effective Management” in *Building Native Nations: Environment, Natural Resources, and Governance*, ed. by Stephanie Carroll Rainie, Udall Center for Studies in Public Policy, The University of Arizona, 2003.

Statement to U.S. House of Representatives Committee on Government Reform, Subcommittee for Energy Policy, Natural Resources and Regulatory Affairs, Hearings Regarding Natural Gas Capacity, Infrastructure Constraints, and Promotion of Healthy Natural Gas Markets, Especially in California, October 16, 2001.

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“Redistribution of Wealth in Federal Oil Policy,” *San Diego Business Journal*, August 18, 1980, pp. 22-23.

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“Windfall Profits Tax Will Reap Bonanza—But For Whom?” (with Peter Navarro), *The Miami Herald*, December 23, 1979, editorial page.

### **SELECTED PRESENTATIONS**

Keynote Address: “Harvesting Creosote to Build Houses: Is Arizona’s Economic Model Sustainable?” 96<sup>th</sup> Arizona Town Hall, Tucson, AZ, April 26, 2010.

Keynote Address: “Resurgence and Renaissance in Indian America,” Native American Business Association Annual Convention, Mississippi Choctaw Nation, April 29, 2008.

“Standard Oil to Today: Antitrust Enforcement in the Oil Industry,” American Bar Association, 56<sup>th</sup> Antitrust Law Spring Meeting, Washington, D.C., March 27, 2008.

Keynote Address: “Nation Building: Lessons from Indian Country,” National Native American Economic Policy Statement, Phoenix, AZ, May 15, 2007.

Keynote Address: “A Conversation on the State of the Native Nations: A Gathering of Leaders,” Res 2007, Las Vegas, NV, March 14, 2007.

“Foundations of Nation Building: The Roles of Culture, Institutions, & Leadership Among Contemporary American Indian Nations,” a lecture to faculty, staff and students, Marine Corps University, Quantico, VA, March 12, 2007.

Keynote Address: “The Universal Challenge of Nation Building,” First Annual Great Lakes Tribal Economic Development Symposium, Traverse City, MI, October 25-26, 2006.

Transcript of Keynote Address, “Setting the Agenda: What Will Drive Energy’s Future?” *Congressional Quarterly Forum*, “The Politics of Oil: U.S. Imperatives, Foreign Consequences,” Washington, D.C., September 13, 2005.

“The Role of the Tribal Courts and Economic Development,” Bureau of Indian Affairs, *Tribal Courts in the 21<sup>st</sup> Century*, Billings, MT, August 16, 2005.

"Linking Tribal Sovereignty to Economic Self-Determination in Indian Country," *The Tribal Leaders Forum*, "Sovereignty in Crisis," Las Vegas, NV, May 27, 2005.

"Competition and Regulation in the North American Electricity Industry: Can These Two Seemingly Opposed Forces Coexist?" (with Charles Augustine and Joseph Cavicchi), 24<sup>th</sup> Annual North American Conference, USAEE/IAEE, Energy, Environment, and Economics in a New Era, Washington, DC, July 8-10, 2004.

"The State of U.S. Railroads and the Challenges Ahead," briefing of Capitol Hill staff, Association of American Railroads, April 17, 2003.

"The State of the Railroad Industry and the Challenges Ahead," briefing of Roger Nober, Chairman, US Surface Transportation Board, Association of American Railroads, January 28, 2003.

"The Wealth of American Indian Nations: Culture and Institutions," Federal Reserve Bank of Boston, December 11, 2002.

"The Roots of California's Energy Crisis: Law, Policy, Politics, and Economics," Regulation Seminar, Center for Business and Government, Kennedy School, Harvard University, November 7, 2002.

"Public Policy Foundations of Nation Building in Indian Country," National Symposium on Legal Foundations of American Indian Self-Governance," Mashantucket Pequot Nation, February 9, 2001.

"Twenty-Five Years of Self-Determination: Lessons from the Harvard Project on American Indian Economic Development," Udall Center for Studies in Public Policy, University of Arizona, November 13-14, 1999.

Proceedings of the Fourth Annual DOE-NARUC Natural Gas Conference, Orlando, FL, February 1995.

Keynote Address, "Sovereignty and American Indian Economic Development," Arizona Town Hall, Grand Canyon, AZ, October 1994.

"Is the Movement Toward a Less-Regulated, More Competitive LDC Sector Inexorable?, (Re)Inventing State/Federal Partnerships: Policies for Optimal Gas Use," U.S. Department of Energy and The National Association of Regulatory Utility Commissioners Annual Conference, Nashville, TN, February 1994.

"Cultural Evolution and Constitutional Public Choice: Institutional Diversity and Economic Performance on American Indian Reservations," *Festschrift in Honor of Armen A. Alchian*, Western Economic Association, Vancouver, BC, July 1994.

“Precedent and Legal Argument in U.S. Trade Policy: Do they Matter to the Political Economy of the Lumber Dispute?” National Bureau of Economic Research, Conference on Political Economy of Trade Protection, February, September 1994.

“The Redesign of Rate Structures and Capacity Auctioning in the Natural Gas Pipeline Industry,” Natural Gas Supply Association, Houston, TX, March 1988.

“Property Rights and American Indian Economic Development,” Pacific Research Institute Conference, Alexandria, VA, May 1987.

“The Development of Private Property Markets in Wilderness Recreation: An Assessment of the Policy of Self-Determination by American Indians,” Political Economy Research Center Conference, Big Sky, MT, December 4-7, 1985.

“Lessons from the U.S. Experience with Energy Price Regulation,” International Association of Energy Economists Delegation to the People's Republic of China, Beijing and Shanghai, PRC, June 1985.

“The Impact of Domestic Regulation on the International Competitiveness of American Industry,” Harvard/NEC Conference on International Competition, Ft. Lauderdale, FL, March 7-9, 1985.

“The Welfare and Competitive Effects of Natural Gas Pricing,” American Economic Association Annual Meetings, December 1984.

“The Ideological Behavior of Legislators,” Stanford University Conference on the Political Economy of Public Policy, March 1984.

“Principal-Agent Slack in the Theory of Bureaucratic Behavior,” Columbia University Center for Law and Economic Studies, 1984.

“The Political Power of the Underground Coal Industry,” FTC Conference on the Strategic Use of Regulation, March 1984.

“Decontrolling Natural Gas Prices: The Intertemporal Implications of Theory,” International Association of Energy Economists Annual Meetings, Houston, TX, November 1981.

“The Role of Government and the Marketplace in the Production and Distribution of Energy,” Brown University Symposium on Energy and Economics, March 1981.

“A Political Pressure Theory of Oil Pricing,” Conference on New Strategies for Managing U.S. Oil Shortages, Yale University, November 1980.

“The Politics of Energy,” Eastern Economic Association Annual Meetings, 1977.

**WORKSHOPS PRESENTED**

Federal Reserve Bank of Boston; University of Indiana; University of Montana; Oglala Lakota College; University of New Mexico; Columbia University Law School; Department of Economics and John F. Kennedy School of Government, Harvard University; MIT; University of Chicago; Duke University; University of Rochester; Yale University; Virginia Polytechnic Institute; U.S. Federal Trade Commission; University of Texas; University of Arizona; Federal Reserve Bank of Dallas; U.S. Department of Justice; Rice University; Washington University; University of Michigan; University of Saskatchewan; Montana State University; UCLA; University of Maryland; National Bureau of Economic Research; University of Southern California.

**TEACHING**

Markets and Market Failure with Cases (Harvard Kennedy School of Government, graduate); Native Americans in the 21<sup>st</sup> Century: Nation Building I & II (Harvard, University-wide, graduate and undergraduate); Competition, Strategy, and Regulation (Harvard Kennedy School of Government, graduate); The Law, Policy, and Economics of Contemporary Tribal Economic Development (University of Arizona, School of Law and College of Management, graduate); Introduction to Environment and Natural Resource Policy (Harvard Kennedy School of Government, graduate); Seminar in Positive Political Economy (Harvard Kennedy School of Government, graduate); Intermediate Microeconomics for Public Policy (Harvard Kennedy School of Government, graduate); Natural Resources and Public Lands Policy (Harvard Kennedy School of Government, graduate); Economics of Regulation and Antitrust (Harvard Department of Economics, graduate); Economics of Regulation (Harvard Department of Economics, undergraduate); Introduction to Energy and Environmental Policy (Harvard Kennedy School of Government, graduate); Graduate Seminar in Industrial Organization and Regulation (Harvard Department of Economics, graduate); Intermediate Microeconomics (Harvard Department of Economics, undergraduate); Principles of Economics (Harvard Department of Economics, undergraduate); Seminar in Energy and Environmental Policy (Harvard Kennedy School of Government, graduate)

**OTHER PROFESSIONAL ACTIVITIES**

Board of Directors, Sonoran Institute, 2008-present

National Advisory Board, Big Sky Institute, Montana State University, 2007-present

Board of Trustees, The Communications Institute, 2003-present

Board of Trustees, Fort Apache Heritage Foundation, 2000-present

Mediator (with Keith G. Allred), Nez Perce Tribe and the North Central Idaho Jurisdictional Alliance, MOU signed December 2002

Mediator, *In the Matter of the White Mountain Apache Tribe v. United States Fish and Wildlife Service*, re: endangered species management authority, May-December, 1994

Steering Committee, National Park Service, 75th Anniversary Symposium, 1991-1993

Board of Trustees, Foundation for American Communications, 1989-2003

Editorial Board, *Economic Inquiry*, 1988-2002

Advisory Committee, Oak Ridge National Laboratory, Energy Division, 1987-1989

Commissioner, President's Aviation Safety Commission, 1987-1988

Principal Lecturer in the Program of Economics for Journalists, Foundation for American Communications, teaching economic principles to working journalists in the broadcast and print media, 1979-present

Lecturer in the Economics Institute for Federal Administrative Law Judges, University of Miami School of Law, 1983-1991

Research Fellow, Energy and Environmental Policy Center, John F. Kennedy School of Government, Harvard University, 1981-1987

Editorial Board, MIT Press Series on *Regulation of Economic Activity*, 1984-1992

Research Advisory Committee, American Enterprise Institute, 1979-1985

Editor, *Quarterly Journal of Economics*, 1979-1984

Referee for *American Economic Review*, *Bell Journal of Economics*, *Economic Inquiry*, *Journal of Political Economy*, *Review of Economics and Statistics*, *Science Magazine*, *Journal of Policy Analysis and Management*, *Social Choice and Welfare*, *Quarterly Journal of Economics*, MIT Press, North-Holland Press, Harvard University Press, *American Indian Culture and Research Journal*

## **HONORS AND AWARDS**

*Public Sector Leadership Award*, National Congress of American Indians, Washington, DC, March 1, 2010.

*First American Public Policy Award*, First American Leadership Awards 2005, "Realizing the Vision: Healthy Communities, Businesses, and Economies," National Center for American Indian Enterprise Development, Phoenix, AZ, June 9, 2005.

Allyn Young Prize for Excellence in the Teaching of the Principles of Economics, Harvard University, 1978-1979 and 1979-1980

Chancellor's Intern Fellowship in Economics, September 1973 to July 1978, one of two awarded in 1973, University of California, Los Angeles

Smith-Richardson Dissertation Fellowship in Political Economy, Foundation for Research in Economics and Education, June 1977 to September 1977, UCLA

Summer Research Fellowship, UCLA Foundation, June 1976 to September 1976

Dissertation Fellowship, Hoover Institution, Stanford University, September 1977 to June 1978

Four years of undergraduate academic scholarships, 1969-1973; graduated with University Distinction and Departmental Honors, Stanford University

Research funding sources have included: Annie E. Casey Foundation; Nathan Cummings Foundation; Department of Indian Affairs and Northern Development (Canada); National Indian Gaming Association; The National Science Foundation; USAID (IRIS Foundation); Pew Charitable Trust; Christian A. Johnson Family Endeavor Foundation; The Ford Foundation; The Kellogg Foundation; Harvard Program on the Environment; The Northwest Area Foundation; the U.S. Department of Energy; the Research Center for Managerial Economics and Public Policy, UCLA Graduate School of Management; the MIT Energy Laboratory; Harvard's Energy and Environmental Policy Center; the Political Economy Research Center; the Center for Economic Policy Research, Stanford University; the Federal Trade Commission; Resources for the Future; and The Rockefeller Foundation.

## **EXPERT TESTIMONY**

Arkansas Electric Cooperative

*Before the Surface Transportation Board, In re STB Finance Docket No. 35305, Petition of Arkansas Electric Cooperative Corporation for a Declaratory Order, Rebuttal Verified Statement of Joseph P. Kalt and Glenn Mitchell, June 4, 2010.*

Cypress Semiconductor Corporation

*In the US District Court for the Northern District of California Oakland Division, In re SRAM Antitrust Litigation, MDL No. 1819, Expert Report on Behalf of Defendant Cypress Semiconductor Corporation, May 4, 2010; Oral Deposition, June 8, 2010.*



## Dean Foods Company, et al.

*In the US District Court for the Eastern District of Tennessee Greenville Division, Food Lion, LLC, et al., Plaintiffs, vs. Dean Foods Company, et al., Defendants, Case No. 2:07-CV-188, Expert Report on Behalf of the Defendants May 3, 2010; Oral Deposition, June 11, 2010.*

*In the US District Court for the Eastern District of Tennessee Greenville Division, Sweetwater Valley Farm, Inc., et al., Plaintiffs, vs. Dean Foods Company, et al., Defendants, MDL No. 1899, Expert Report on Behalf of the Defendants, May 3, 2010.*

## McKesson Corporation

*In the US District Court for the District of Massachusetts, the State of Connecticut v. McKesson Corporation in Civil Action No. 08-10900-PBS, Responsive Expert Report, on Behalf of McKesson Corporation, April 14, 2010.*

*In the US District Court for the District of Massachusetts, New England Carpenters Health Benefits Fund, et al. v First Databank, Inc. and McKesson Corporation, No. 05-11148-PBS, Report, January 28, 2008; Rebuttal Report, October 1, 2008.*

## CITGO Petroleum Corporation

*In the United States District Court, Northern District of Oklahoma, in Re: Stephenson Oil Company, on behalf of itself and all others similarly situated, Plaintiff, vs. CITGO Petroleum Corporation, Defendant, Case No. 08-CV-380-TCK-TLW, Expert Report on behalf of Defendant, November 20, 2009; Oral Testimony, February 25, 2010.*

## Confederated Tribes of the Chehalis Reservation

*In the United States District, Western District of Washington at Tacoma, in Re: Confederated Tribes of the Chehalis Reservation, Plaintiffs, v. Thurston County Board of Equalization, Defendants, Civil Action No. C08 5562, Expert Report On Behalf of the Confederated Tribes of the Chehalis Reservation, October 15, 2009; Oral Deposition, December 4, 2009.*

## Rio Tinto

*In the Australian Competition Tribunal, Application for the Review of the Deemed Decision by the Commonwealth Treasurer of 23 May 2006 Under Section 44H(9) of the Trade Practices Act in Relation to the Application for Declaration of Services Provided by The Mount Newman Railway Line; Application for Review of the Decision by the Commonwealth Treasurer of October 27, 2008 Under Section 44h(1) of Trade Practices Act in Relation to the Application for Declaration of a Service Provided by the Robe Railway; Application for Review of the Decision by the Commonwealth Treasurer of October 27, 2008 Under Section 44h(1) of Trade Practices Act in Relation to the Application for Declaration of a Service Provided by the Hamersley Rail Network; and Application for Review of the Decision by the*

*Commonwealth Treasurer of October 27, 2008 Under Section 44h(1) of Trade Practices Act in Relation to the Application for Declaration of a Service Provided by the Goldsworthy Railway, Affidavit, July 3, 2009.*

North West Shelf Gas Party Ltd.

*In the Matter of the Commercial Arbitration Act and an Arbitration Between Woodside Energy Ltd. and Others, Sellers, and Alinta Sales Party Ltd., Buyer, Statement and Expert Report on Behalf of the Sellers, July 3, 2009; Oral Testimony, August 26-27, 2009.*

Gunnison Energy Corporation, SG Interests I, Ltd., and SG Interests VII, Ltd.

*In the United States District Court for the District of Colorado In re: Riviera Drilling & Exploration Company, Plaintiff, v. Gunnison Energy Corporation, SG Interests I, Ltd., and SG Interests VII, Ltd., Defendants, Civil Action No. 08-cv-02486-REB-CBS, Expert Report, June 24, 2009; Expert Rebuttal Report, August 24, 2009; Deposition, October 20, 2009.*

Gannett Company, Inc *et al.*

*In the United States District Court for the District of Arizona, State of Arizona ex rel. Terry Goddard, Attorney General, Plaintiff, v. Gannett Company, Inc.; Citizen Publishing Company; Lee Enterprises, Inc.; Star Publishing Company; and TNI Partners, Defendants, Affidavit of Joseph P. Kalt, Ph.D., On Behalf of Defendants, May 18, 2009.*

Hyundai Heavy Industries Co., Ltd., *at al.*

*International Chamber of Commerce, Court of Arbitration Case No. 15521/JEM/CYK, Hyundai Heavy Industries Co., Ltd., et al., Claimants v. International Petroleum Investment Company, et al., Respondents, Witness Statement of Joseph P. Kalt, Ph.D., February 20, 2009; Oral Testimony, May 27, 2009.*

Shell Oil Company; Shell Oil Products Company; Shell Trading (US) Company, LLC; Shell Enterprises, LLC; Motiva Enterprises, LLC; and TMR Company

*In the United States District Court for the Southern District of New York, MDL No. 1358, Case No. 04-CV-3417 (SAS), In re: Methyl Tertiary Butyl Ether ("MTBE"), City of New York, Plaintiff v Amerada Hess Corporation, et al., Defendants, Expert Report on Behalf of Shell Defendants, February 13, 2009; Supplemental Expert Report on Behalf of Shell Defendants, March 30, 2009.*

City of Los Angeles, California, *et al.*

*US District Court, District of Columbia, Federal Maritime Commission v. City of Los Angeles, California, et al. Civil Action No. 1:08-cv-010895-RJL, Declaration, November 26, 2008.*

## PPL Companies

*Federal Energy Regulatory Commission, Docket No. EL08-67-00 Protest of the PPL Companies to the Complaint of the RPM Buyers*, Affidavit (with A.J. Cavicchi), July 11, 2008; *Answer of the PPL Companies to the Motion for Leave to Answer and Answer of the RPM Buyers*, Suppl. Affidavit (with A.J. Cavicchi), August 12, 2008.

## Federal Government of Canada

*London Court of International Arbitration, In the Matter of Arbitration No. 81010, The United States of America v. Canada*, Expert Witness Statement of Joseph P. Kalt, February 20, 2009; Rebuttal Expert Witness Report, May 8, 2009; Second Rebuttal Expert Witness Report, July 7, 2009; Oral Testimony, July 22-23, 2009; Expert Report (with Robert H. Topel), June 15, 2010.

*London Court of International Arbitration, In the Matter of Arbitration No. 91312, The United States of America v. Canada*, Expert Witness Statement of Joseph P. Kalt and David Reishus, May 12, 2009; June 11, 2009.

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Bethlehem Steel Corporation

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Dorchester Gas Corp.

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## **CURRICULUM VITAE**

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### **PROFESSIONAL EXPERIENCE**

Compass Lexecon, Boston, MA  
*Senior Vice President*, January 1, 2007–present  
*Managing Director*, 2003–2006  
*Vice President*, 2001– 2003  
*Senior Consultant*, 1999–2001  
*Consultant*, 1997–1999

Provides wholesale and retail electricity market regulatory economic analyses in connection with the restructuring of the US electricity industry. In particular, advises clients in a variety of Federal Energy Regulatory Commission and state regulatory proceedings, and files testimony and affidavits supported by economic analyses.

Extensive knowledge of wholesale market operations with general economic theory of contracting and electricity generation plant dispatch that provides companies with detailed analyses that impact both regulatory and business decisions. Actively involved in the electricity industry both before and after restructuring for a total of nearly 20 years.

Tufts University, Medford, MA  
*Adjunct Instructor*, Summer 2000

Taught graduate-level environmental economics.

Massachusetts Institute of Technology, Cambridge, MA  
*Research Engineer*, 1997  
*Research Assistant*, 1995-1997

Performed an analysis of water and electricity resources in Mendoza, Argentina. Developed a computer simulation model to support analysis and permit the display of results to a diverse group of stakeholders. Traveled frequently to Mendoza to interact with government officials and relevant institutions in an effort to establish electricity and water policy.

Massachusetts Institute of Technology, Cambridge, MA  
*Project Manager/Staff Mechanical Engineer*, 1989-1995

Managed the development, engineering, and construction of a \$40 million, 20 MW gas turbine-based cogeneration facility at the Cambridge campus. Directed all attributes of the project for its three-year duration. Involved extensively in energy conservation programs with emphasis on building and utility plant optimization through innovative engineering applications.

Carrier Building Systems and Services, Waltham, MA  
*Project Engineer*, 1987-1988

Engineered and managed the installation of Energy Management Systems used exclusively for demand-side management. Interfaced direct digital control systems to mechanical equipment associated with thermal systems of industrial, commercial, and educational buildings.

## **EDUCATION**

Massachusetts Institute of Technology, Cambridge, MA  
S.M. in Technology Policy, 1997

Tufts University, Medford, MA  
S.M. in Environmental Engineering, 1992

University of Connecticut, Storrs, CT  
B.S. Mechanical Engineering, 1987

## **TESTIMONY**

BG Masspower

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#### PPL Montana LLC

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#### Constellation New Energy

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#### Energy Northwest

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#### Entegra Power Services LLC

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Power Analysis for EPS' Affiliate, Gila River. Affidavit of A. Joseph Cavicchi, March 13, 2009. Written, Public.

Union Pacific Railroad Company

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PPL Electric Utilities Corporation

*Before the Pennsylvania Public Utility Commission*, RE: Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period January 1, 2001 through May 31, 2014. Docket No. P-2008-2060309. Testimony of A. Joseph Cavicchi, on behalf of PPL Electric Utilities Corporation, February 11, 2009. Oral, Public.

PPL Electric Utilities Corporation

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## PPL Electric Utilities Corporation

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## PPL Electric Utilities Corporation

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## Entegra Power Group L.L.C.

*United States of America, Before the Federal Regulatory Commission, Docket No. ER05-1178-00 and ER05-1191-00. Affidavit of A. Joseph Cavicchi on behalf of Entegra Power Group L.L.C, Gila River Power, L.P., Union Power Partners, L.P., Harbinger Capital Partners Master Fund I, Ltd., and Harbinger Capital Partners Special Situations Fund, LP, May 30, 2008.*

## Harbinger

*United States of America, Before the Federal Regulatory Commission, Docket No. EC08-87-000. Affidavit of A. Joseph Cavicchi on behalf of the Entegra Power Group L.L.C, Gila River Power, L.P., Union Power Partners, L.P., Harbinger Capital Partners Master Fund I, Ltd., and Harbinger Capital Partners Special Situations Fund, LP, May 9, 2008.*

## IEPA

*United States of America, Before the Federal Regulatory Commission, Docket Nos. ER08-556-000 and ER06-615-020. Affidavit of A. Joseph Cavicchi on behalf of Independent Energy Producers Association, February 29, 2008.*

## P3 Group

*United States of America, Before the Federal Regulatory Commission, Docket No. EL08-34-000. Affidavit of Joseph P. Kalt and A. Joseph Cavicchi on behalf of the P3 Group, responding to the Complaint of the Maryland Public Service Commission against PJM Interconnection, L.L.C. regarding marketing power mitigation, February 19, 2008.*

## Tractebel Energy Marketing, Inc.

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### Triennial Market Power Update

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### IEPA

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### NRG

*United States of America, Before the Federal Regulatory Commission. New York Independent System Operator – Docket No. EL07-39-000. Affidavits of A. Joseph Cavicchi on behalf of NRG Power Marketing, Inc., Arthur Kill Power LLC, Astoria Gas Turbine Power LLC, Dunkirk Power LLC, Huntley Power LLC, and Oswego Harbor Power LLC, November 19, 2007, December 10, 2007 and December 21, 2007. Written, Public.*

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### Cross Hudson

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*Before The Pennsylvania Public Utility Commission, Re: Petition of PPL Electric Utilities Corporation for Approval of A Competitive Bridge Plan, Docket No. P-00062227, Reply to Surrebuttal Testimony of Marjorie R. Philips, Joseph Cavicchi, December 20, 2006. Written, Public.*

PJM Interconnect, LLC

*United States of America, Before the Federal Regulatory Commission, Docket No. EL05-148-000, 001; Docket No. ER05-1410-000, 001, Initial Comments of the PPL Parties and the PSEG Companies in Opposition to Proposed Settlement, Exhibit D-1 (Exhibit AJC-1), Affidavit of A. Joseph Cavicchi, Affidavit, October 19, 2006, Written, Public.*

Excelsior Energy Inc.

*Before The Minnesota Office Of Administrative Hearings, Re: In The Matter Of The Petition Of Excelsior Energy Inc. And Its Wholly-Owned Subsidiary MEP-I, LLC For Approval Of Terms And Conditions For The Sale Of Power From Its Innovative Energy Project Using Clean Energy Technology Under Minn. Stat. §216B.1694 and a Determination That The Clean Energy Technology Is Or Is Likely To Be A Least-Cost Alternative Under Minn. Stat. §216B.1693, MPUC Docket No. E-6472-/M-05-1993; OAH Docket No. 12-2500-17260-2, Prepared Rebuttal Testimony and Exhibits of Excelsior Energy Inc. and MEP-I LLC, Rebuttal and Exhibits of Joseph Cavicchi, October 10, 2006. Written, Confidential.*

PPL Electric Utilities Corporation

*Before The Pennsylvania Public Utility Commission, Re: Petition of PPL Electric Utilities Corporation for Approval of A Competitive Bridge Plan, Docket No. P-00062227, Statement No. 2, Direct Testimony of Joseph Cavicchi, September 15, 2006. Written, Public.*

Independent Energy Producers Association of California

*United States of America, Before the Federal Regulatory Commission, Docket No. EL05-146-000, Reply Comments of the Independent Energy Producers Association, September 26, 2006; Affidavit of Joseph Cavicchi, August 26, 2006, Written, Public.*

Independent Energy Producers Association of California

*United States of America, Before the Federal Regulatory Commission, Docket No. EL05-146-000, Affidavit in Support of Justness and Reasonableness of the Offer of*



Settlement's Reference Resource's Cost and Performance Characteristics, Affidavit of Joseph Cavicchi, August 21, 2006, Written, Public.

PPL Maine, LLC

*United States of America, Before the Federal Regulatory Commission, RE: PPL Maine, LLC , Docket No. ER00-2186-002, Triennial Market-Based Rate Update. Affidavit of A. Joseph Cavicchi on behalf of the PPL Companies, June 19, 2006. Written, Public.*

FirstEnergy Solutions Corp.

*United States of America, Before the Federal Regulatory Commission, FirstEnergy Solutions Corp., Docket No. ER06-117-000, Prepared Direct Testimony of Scott T. Jones, Ph.D., and A. Joseph Cavicchi on behalf of FirstEnergy Solutions Corporation, March 15, 2006, confirming the auction price result of the Competitive Bidding Process carried out by the Ohio Public Utilities Commission in December 2004, and establishing that Solutions is not charging a rate greater than market prices for wholesale electricity sold to its affiliated Ohio based regulated distribution companies.*

PPL Montana, LLC

*United States of America, Before the Federal Energy Regulatory Commission, RE: PPL Montana, LLC, Docket No. ER99-3491-003; PPL Colstrip I, LLC, Docket No. ER00-2184-001; PPL Colstrip II, LLC, Docket No. ER00-2185-001; Answer of the PPL Montana Parties to Montana Consumer Counsel's New Uncommitted Capacity Pivotal Supplier Analysis and Uncommitted Capacity Market Share Analysis, Affidavit (filed with Joseph Kalt), February 28, 2005; Affidavit (filed with Joseph Kalt), November 14, 2005 (original October 31, 2005); First Supplemental Affidavit on Behalf of the PPL Montana Parties, (filed with Joseph Kalt), December 23, 2005; Affidavit (filed with Joseph Kalt), February 1, 2006.*

PPL Corporation

*United States of America, Before the Federal Energy Regulatory Commission, Triennial Market-Based Rate Update, Submitted by PPL Great Works, Docket No. ER05-4503-004, Affidavit, January 24, 2006.*

Independent Energy Producers Association of California

*Before the Public Utilities Commission of the State of California, Evidentiary Hearings, Dockets Nos. R04-04-025 and R04-04-003. Testimony of Joseph Cavicchi and David Reishus on behalf of Independent Energy Producers Association of California, January 23 and 24, 2006. Oral, Public.*

## PPL Corporation

*United States of America, Before the Federal Energy Regulatory Commission, Docket No. ER05-1416-000, Affidavit of A. Joseph Cavicchi, Joseph P. Kalt, Ph.D., and David A. Reishus, Ph.D. on Behalf of the PPL Parties, Affidavit, October 19, 2005.*

## Independent Energy Producers Association of California

*United States of America, Before the Federal Energy Regulatory Commission, Docket No. EL05-146-000, Affidavit in Support of the Complaint of the Independent Energy Producers Association to Implement CAISO Market Design Modifications, Affidavit, August 26, 2005.*

## PPL Corporation

*United States of America, Before the Federal Energy Regulatory Commission, "A Policy Analysis of PJM's Proposed Four-Year Forward Capacity Market." With Joseph P. Kalt, submitted in PPL Resource Adequacy Market Proposal, Docket No. PL05-7-000, June 16, 2005.*

## PPL EnergyPlus

*United States of America, Before the Federal Energy Regulatory Commission, Docket ER00-1712-004, Request for Leave to Respond and Response of PPL Parties to Protest of PJM Industrial Customer Coalition and the PP&L Industrial Customer Alliance and to Comments of Joint Consumer Advocates, Supplemental Affidavit, December 16, 2004.*

## PPL Montana, LLC

*United States of America, Before the Federal Energy Regulatory Commission, RE: PPL Montana, LLC; PPL Colstrip I, LLC; PPL Colstrip II, LLC; Docket No. ER99-3491-\_\_, Compliance Filing: Triennial Market-Based Rate Update and Revised Tariff Sheet, Affidavit (filed with Joseph Kalt), November 9, 2004.*

*United States of America, Before the Federal Energy Regulatory Commission, PPL Colstrip I, LLC; PPL Colstrip II, LLC; Docket No. ER99-3491-003, market power analysis in support of application for renewal of authority to sell electric energy and capacity at market-based rates, Affidavit (filed with Joseph Kalt), November 9, 2004.*

## PPL EnergyPlus

*United States of America, Before the Federal Energy Regulatory Commission, PPL EnergyPlus et al., Docket ER00-1712-004, market power analysis in support of application for renewal of authority to sell electric energy and capacity at market-based rates, Supplemental Affidavit, November 9, 2004.*

## PPL Southwest Generation Holdings, LLC

*United States of America, Before the Federal Energy Regulatory Commission, PPL Southwest Generation Holdings, LLC, Docket No. ER01-1870-002, market power*

analysis in support of application for renewal of authority to sell electric energy and capacity at market-based rates. Supplemental Affidavit, October 25, 2004.

PPL Wallingford Energy LLC

*United States of America, Before the Federal Energy Regulatory Commission, PPL Wallingford Energy LLC, Docket No. ER01-1559-002, market power analysis in support of application for renewal of authority to sell electric energy and capacity at market-based rates, Supplemental Affidavit, October 8, 2004.*

PPL Wallingford Energy LLC

*United States of America, Before the Federal Energy Regulatory Commission, PPL Wallingford Energy LLC, Docket No. ER01-1559-002, market power analysis in support of application for renewal of authority to sell electric energy and capacity at market-based rates. Affidavit, July 12, 2004.*

PPL Southwest Generation Holdings, LLC

*United States of America, Before the Federal Energy Regulatory Commission, PPL Southwest Generation Holdings, LLC, Docket No. ER01-1870-002, market power analysis in support of application for renewal of authority to sell electric energy and capacity at market-based rates. Affidavit, July 12, 2004.*

PPL Wallingford Energy LLC

*United States of America, Before the Federal Energy Regulatory Commission, PPL Wallingford Energy LLC and PPL EnergyPlus, LLC, Petition for Rehearing, Request for Clarification and Request for Expedited Action on Rehearing and Clarification of PPL Wallingford Energy LLC and PPL EnergyPlus, LLC. Affidavit, June 16, 2003.*

Massachusetts Department of Telecommunications and Energy

Submission of comments on the investigation by the Massachusetts DTE on its own motion into the Provision of Default Service, DTE 02-40-B (with Charles Augustine). May 28, 2003.

## **BUSINESS STRATEGY ANALYSES**

### Electricity Generation Facility Developers

Oversees the development and implementation of transmission-constrained dispatch modeling for proposed electricity generation units locating in the Northeastern, Mid-Atlantic, and Midwestern United States. Analyses typically focus on determining likely facility capacity factors and impacts on local and regional air pollutant emissions as well as on wholesale electricity prices. In addition, these analyses provide detailed knowledge of new facilities' impacts on the operation of the electricity transmission system that is critical to assessing the ability of a generating unit to deliver its power in a wide geographical area.

### Electricity Distribution Companies

Provide extensive strategic advice and analytical support to electricity distribution companies that are required to assess new wholesale marketplaces in order to fulfill their regulatory commitments as providers of last resort or default electricity service. In most instances these companies require assistance with the development and issuance of requests for proposals as well as rapid evaluation of commodity bids. The assignments combine extensive knowledge of wholesale market operations with general economic theory of contracting and electricity generation plant dispatch in order to provide companies with an approach to commodity procurement that agrees with their risk profile. In most cases there are numerous business and regulatory concerns that are incorporated into the procurement strategies. Additionally, each assignment typically requires extensive analysis of customer demand patterns and wholesale market prices in order to develop market-based customer service cost forecasts.

### **PUBLICATIONS**

“U.S. Centralized Wholesale Electricity Markets: An Update”, published in the International Association for Energy Economics Newsletter, First Quarter 2007, pp. 8-12.

“Power Procurement. What’s in Your Mix? Why Competitive Markets are Scaring Regulators”, with Andrew Lemon, published in Public Utilities Fortnightly, November 2006, pp. 49-54.

“Competition and Regulation in the Power Industry, Part III: Tensions Evolve Between Regulation and Competition”, with Charles Augustine and Joseph Kalt, published in Electric Light & Power, January/February 2006: volume 84.01, pp 24-25.

“Gradualism in Retail Restructuring.” with Charles Augustine and Joseph P. Kalt, published in Electric Light & Power, September/October 2005: volume 83:05, pp 26-30.

“Competition and Regulation in the Power Industry: Can the Two Coexist?”, with Charles Augustine and Joseph Kalt, published in Electric Light & Power, July/August 2005: volume 83.04, pp 28-31.

“Ensuring The Future Construction of Electricity Generation Plants: The Challenge of Maintaining Reliability in New U.S. Wholesale Electricity Markets.” with Andrew Kolesnikov, published in International Association for Energy Economics Newsletter, First Quarter 2005.

"Electricity Company Affiliate Asset Transfer Self Build Policies: Renewed Regulatory Challenges," with Scott T. Jones, *The Electricity Journal*, November, 2004.

Onward Restructuring, *Hart Energy Markets*, September 2004, Vol. 9, No. 9 at Page 64.

"Competition and Regulation in the North American Electricity Industry: Can These Two Seemingly Opposed Forces Coexist?" with Charlie Augustine and Joseph P. Kalt, Published in the 24<sup>th</sup> Annual North American Conference of the USAEE/IAEE Proceedings, July 9, 2004, Washington, DC.

Wholesale Electricity Procurement Strategies for Serving Retail Demand, *International Association for Energy Economics Newsletter*, First Quarter, 2004.

"Economic and Environmental Benefits of the Kings Park Energy Project: System Production Modeling Report" (with Susan F. Tierney), January 25, 2002.

"Economic and Environmental Benefits of the Wawayanda Energy Center: System Production Modeling Report" (with Susan F. Tierney), August 24, 2001.

"Air Pollution Reductions Resulting from the Kings Park Energy Project" (with Susan F. Tierney), January 24, 2001.

## **PRESENTATIONS**

"PJM's RPM Auctions: Emerging and Unsettled Issues." NECA Power Markets Conference, November 1, 2007.

"Locational Capacity Markets: Understanding the Upside." New York City, July 8, 2006.

"Competition and Regulation in the North American Electricity Industry: Can These Two Seemingly Opposed Forces Coexist?" 24<sup>th</sup> Annual North American Conference of the USAEE/IAEE, July 9, 2004, Washington, DC.

"Merchant Transmission Investment Regimes: An Outsider's Observations," The East Coast Energy Group, April 16, 2004.

"Wholesale Procurement Strategies for the Restructured Electricity Markets: Experiences from the Field," Platts First Annual Electricity Market Design Imperative, Chicago, IL, November 6, 2003.

"Power Plant Technologies and Characteristics," The Harvard Institute for International Development's Third Annual Program on Climate Change and Development, Cambridge, MA, June 19, 2000.

“Transmission Planning & Investment in the RTO Era” (with John Farr and Susan F. Tierney), workshop at Infocast Conference on Transmission Pricing, Chicago, IL, May 1, 2000.

“The US Market for Merchant Plants—Outlooks, Opportunities and Impediments,” CBI’s 4<sup>th</sup> Annual Profit from Merchant Plants Conference, January 31, 2000.

“Projecting Electricity Prices for a Restructured Electricity Industry,” EXNET Merchant Power Plant Conference, Washington, DC, June 3, 1999.

“Transmission Planning and Competitive Generation Markets: The New England Case,” EUCI conference on Transmission Restructuring for Retail Competition, Denver, CO, March 25, 1999.

“Key Issues in Ancillary Service Markets,” IBC conference on Pricing and Selling Ancillary Services in a Competitive Market Conference, San Francisco, CA, March 11, 1999.

“Successfully Forecasting the Price of Energy and Other Products,” workshop presented at IBC’s conference on Successful Load Profiling, San Francisco, CA, December 2, 1998.

“International Perspective: Lessons from the US Deregulation Experience,” Nordic Power ’98, Stockholm, Sweden, October 7, 1998.

“Successfully Forecasting the Price of Energy and Other Products in a Restructured Electric Power Industry,” workshop presented at IBC’s 3<sup>rd</sup> Strategic Forum on Market Price Forecasting, Baltimore, MD, August 24, 1998.

“Managing Market Share Loss with the Opening of Retail Markets to Competition,” Electric Utility Business Environment Conference, Denver, CO, June 24, 1998.

“Multi-Attribute Trade-Off Analysis for Water and Electricity Policy Development,” presented in Mendoza, Argentina, July 1996 and April 1997.

“The Basics of Cogeneration,” presented at the Tufts University Forum on Energy Conservation, December 1993.

“Implications and History of the MIT Cogeneration Project,” presented to the Massachusetts Society of Professional Engineers, November 1993.

**CERTIFICATIONS**

Registered Professional Engineer, Commonwealth of Massachusetts

**PROFESSIONAL AFFILIATIONS**

Member, Board of Directors, Northeast Energy and Commerce Association, 2002-present

### **APPENDIX 3**

The public version of the workpapers of Dr. Joseph P. Kalt and Mr. A Joseph Cavicchi that exclude the privileged workpapers is being submitted separately on the CD labeled "Public Version of Kalt-Cavicchi Workpapers."



## **APPENDIX 4**

### **PRO FORMA ACCOUNTING ENTRIES**

## **APPENDIX 4**

### Acquisition of E.ON U.S. LLC by PPL Corporation Proposed Accounting Entries

#### **Introduction**

On June 21, 2010, PPL Corporation (PPL) filed a Form 8-K with the Securities and Exchange Commission (SEC) to provide unaudited condensed combined consolidating pro forma financial information of PPL and E.ON U.S. LLC (E.ON US), giving effect to the proposed Transaction. This Appendix shows the pro forma adjustments that, under generally accepted accounting principles and FERC accounting requirements, would be further reflected on the books of E.ON US's subsidiaries Louisville Gas and Electric Company (LG&E) and Kentucky Utilities Company (KU), had the acquisition occurred on March 31, 2010. LG&E and KU are the only entities subject to 18 C.F.R. Part 101 whose accounts will be affected by the Transaction.

Generally accepted accounting principles for business combinations require that most assets and liabilities, whether they are on the balance sheet (*e.g.*, property, plant and equipment) or off the balance sheet (*e.g.*, contractual arrangements that are no longer at current market prices), be measured and recorded at fair value as of the date when control transfers to the new owner. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is widely accepted by the industry and their audit firms, however, that the fair value of most assets and liabilities that comprise regulated operations is the book value from which rates are derived for the utility. Furthermore, transaction costs are immediately expensed by the acquirer, PPL, and are not included in the accounts of LG&E and KU.

Generally accepted accounting principles do not address whether, if an acquired entity continues to prepare separate financial statements, such separate stand-alone financial statements of the acquired entity should reflect the new basis of accounting resulting from the acquisition through what is known as "push-down accounting." However, the SEC's regulations for registrants generally require, subject to certain exceptions, that push-down accounting be applied whenever separate financial information of an acquired entity is presented and the acquired entity is substantially wholly owned. Push-down accounting is not required (but is permitted) for entities that are not SEC registrants, such as LG&E and KU. For companies that become SEC registrants at a later date, SEC regulations generally require that push-down accounting be applied retrospectively. Since PPL currently believes that LG&E and KU will become SEC registrants, the pro forma journal entries shown below reflect push-down accounting. However, notwithstanding any push down accounting adjustments, as explained in the Application, the Applicants have agreed to specific commitments not to reflect any costs associated with the Transaction in either wholesale<sup>1</sup> or retail<sup>2</sup> rates. This commitment extends to the impact of any

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<sup>1</sup> See Application, Section V.B.

<sup>2</sup> See Purchase and Sale Agreement, Exhibit B, Section 8(d).

adjustments to Account 211, "Miscellaneous Paid-in Capital" on the calculation of the Allowance for Funds Used During Construction. The proposed entries reflect the parties' current best estimates of the manner in which the transaction may ultimately be recorded from an accounting standpoint.

## **Pro Forma Accounting Entries**

### **Replace E.ON AG Affiliate Debt with PPL Affiliate Debt**

*(Thousands of dollars)*

	<b>Debit</b>	<b>Credit</b>
<i><u>Kentucky Utilities</u></i>		
223 Long-term debt – Advances from Associated Companies	\$1,298,000	
233 Current Notes Payable to Associated Companies	\$ 33,000	
131 Cash		\$1,331,000
131 Cash	\$1,331,000	
223 Long-term debt – Advances from Associated Companies		\$1,298,000
233 Current Notes Payable to Associated Companies		\$ 33,000
<i><u>Louisville Gas &amp; Electric</u></i>		
223 Long-term debt – Advances from Associated Companies	\$ 485,000	
131 Cash		\$ 485,000
131 Cash	\$ 485,000	
223 Long-term debt – Advances from Associated Companies		\$ 485,000

*PPL is required to repay LG&E's and KU's long-term debt and current notes payable with Fidelity Corporation ("Fidelity") an E.ON AG affiliate which will not be acquired as part of the acquisition. This long-term debt and current notes payable will be replaced at closing with long-term debt and current notes payable with a PPL affiliate. The interest rates will be consistent with LG&E's and KU's existing long-term debt and current notes payable with Fidelity. Shortly following the closing of the Transaction, PPL expects to replace such long-term debt and current notes payable with a PPL affiliate with the issuance by LG&E and KU of first mortgage bonds to unaffiliated entities.*

*The proposed journal entries related to that event are as follows:*

### **Subsequent Replacement of PPL Affiliate Debt with First Mortgage Bonds**

*(Thousands of dollars)*

	<b>Debit</b>	<b>Credit</b>
<i><u>Kentucky Utilities</u></i>		
223 Long-term debt – Advances from Associated Companies	\$1,298,000	
233 Current Notes Payable to Associated Companies	\$ 33,000	
131 Cash		\$1,331,000
131 Cash	\$1,331,000	
221 Long Term Debt – Bonds		\$1,331,000

Louisville Gas & Electric

223	Long-term debt – Advances from Associated Companies	\$485,000	
131	Cash		\$485,000
131	Cash	\$485,000	
221	Long Term Debt – Bonds		\$485,000

**Record Investment in Electric Energy Inc. (EEInc) at Fair Value**

*(Thousands of dollars)*

**Debit                      Credit**

Kentucky Utilities

123.1	Investment in Subsidiary Companies	\$84,854	
211	Miscellaneous paid-in capital		\$84,854
211	Miscellaneous paid-in capital	\$33,008	
190	Accumulated Deferred Income Taxes		\$33,008

*EEInc was formed in 1950, for constructing, owning and operating the electric generating plant in Joppa, Illinois to provide power to a gaseous diffusion uranium plant owned and operated by the United States Atomic Energy Commission (“AEC”) near Paducah, Kentucky. Several independent sponsoring companies, including KU, formed EEInc. Today Ameren Energy Generating Company holds an 80% stake in EEInc; KU owns the remaining 20%. Output from EEInc’s generating facilities is under the operation and control of subsidiaries of Ameren Corporation. EEInc sells its power at market-based rates. KU’s investment in EEInc has never been included in utility capitalization at KU. KU records the earnings on its investments in EEInc on the equity method of accounting, in proportion to KU’s ownership percentage (20%). Correspondingly, the earnings from EEInc have always been recorded in Account 418.1 “Equity in Earnings of Subsidiary Companies.” KU also receives 20% of the cash dividends that are declared and paid by EEInc, which are credited against Account 123.1 “Investment in Subsidiary Companies.”*

*PPL used projected cash flows provided by EEInc and performed a discounted cash flow analysis to arrive at an enterprise value for EEInc. PPL arrived at a fair value measurement of approximately \$100 million after applying KU’s ownership percentage of 20%. Deferred income taxes were recorded using a 38.9% effective tax rate. The amount of the adjustment above only represents the increase in fair value of KU’s 20% interest, as KU already had an investment balance of approximately \$15 million on its books.*

**Recognize Fair Value of Debt**

*(Thousands of dollars)*

**Debit                      Credit**

Kentucky Utilities

186	Miscellaneous Deferred Debits - Other	\$    282	
221	Long Term Debt – Bonds		\$    282

Louisville Gas & Electric

186 Miscellaneous Deferred Debits - Other	\$ 6,279	
221 Long Term Debt – Bonds		\$ 6,279

*Generally accepted accounting principles for business combinations requires that debt be measured and recorded at fair value as of the date when control transfers to the new owner, with the fair value adjustment amortized to interest expense over the life of the debt. As a result of the acquisition, PPL will assume approximately \$925 million of pollution control bonds. At March 31, 2010 the fair value of this non-affiliated debt did not vary significantly from the notional value of the debt, because most of the outstanding debt has floating interest rates, which, by definition, results in a fair value equal to the notional value. The fair value adjustment on the fixed-rate portion of the debt is approximately \$6.5 million higher than the notional value of the debt since interest rates have decreased since rates were set on the fixed-rate bonds. The final fair value adjustment of the debt, if any, will be based on prevailing market interest rates at the completion of the acquisition, however, is not expected to be significant.*

*Any fair value adjustment will be recorded to Account 221 “Long Term Debt – Bonds” and amortized to interest expense over the life of the debt (16 to 27 years), with the offsetting amount recorded to Account 186 “Miscellaneous Deferred Debits” and amortized to interest expense in the same manner, thus resulting in no net impact to interest expense for FERC reporting. Due to the long maturities of the debt, the impact on interest expense over the life of the debt is not expected to be significant.*

#### **Record Goodwill**

*(Thousands of dollars)*

	<b>Debit</b>	<b>Credit</b>
<u>Kentucky Utilities</u>		
186 Miscellaneous Deferred Debits - Goodwill	\$378,785	
211 Miscellaneous paid-in capital		\$378,785
<u>Louisville Gas &amp; Electric</u>		
186 Miscellaneous Deferred Debits - Goodwill	\$238,215	
211 Miscellaneous paid-in capital		\$238,215

*Goodwill represents the excess of the consideration transferred over the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed. The estimated goodwill associated with PPL’s acquisition of E.ON U.S LLC at March 31, 2010 is estimated to be \$617 million, as shown in the preliminary allocation of the \$2,062 million cash purchase price for equity to the assets and liabilities of E.ON US below:*

Cash purchase price for equity	\$ 2,062
Less: fair value of assets acquired & liabilities assumed:	
Current assets	1,059
Property, plant and equipment, net	7,184
Investments	105
Regulatory assets and other noncurrent assets	618
Current liabilities	(791)
Noncurrent liabilities	(1,766)
Long-term debt	(4,964)
	<u>1,445</u>
<b>Goodwill</b>	<b><u>\$ 617</u></b>

Although ultimately, goodwill may be allocated to other non-jurisdictional E.ON US entities, for purposes of these pro forma journal entries, the goodwill has been allocated solely to LG&E and KU, which hold the majority of E.ON US's net assets and will likely receive a substantial allocation of goodwill upon closing. The allocation of goodwill between LG&E and KU was based on a ratio of their equity balances at March 31, 2010. LG&E's equity of \$1,255 million and KU's equity of \$1,996 million represents 39% and 61%, respectively, of their combined equity. As noted above, notwithstanding any push down accounting adjustments, the Applicants have agreed to specific commitments not to reflect any costs associated with the Transaction in either wholesale or retail rates.

Goodwill is not amortized, but is subject to an assessment for impairment at least annually, or more frequently if events or circumstances indicate that goodwill might be impaired. The impairment assessment is performed using a two-step, fair-value based test. The first step compares the fair value of the reporting unit to its carrying amount, including goodwill. If the carrying amount of the reporting unit exceeds its fair value, the second step is performed. The second step requires an allocation of fair value to the individual assets and liabilities using purchase price allocation guidance in order to determine the implied fair value of goodwill. If the implied fair value of goodwill is less than the carrying amount, an impairment loss would be recorded as a debit to Account 426.5 "Other Deductions" and a credit to Account 186 "Miscellaneous Deferred Debits".

For purposes of measuring the fair value of the regulated assets acquired (including property, plant and equipment) and certain regulated liabilities assumed, PPL has assumed that the fair value equaled their net book value. Therefore, no adjustment has been proposed to Account 114 "Electric Plant Acquisition Adjustments", as such amounts were deemed to be at fair value based upon their regulated rate of return. As noted in the Introduction, transaction costs are immediately expensed by the acquirer, PPL, under generally accepted accounting principles and are not included in the purchase price allocation to determine the amount of goodwill noted above. Thus, the accounts of LG&E and KU do not include any transaction costs.

PPL will undertake a detailed valuation study to establish the fair value of all identified assets and liabilities at closing. As such, the goodwill recorded upon acquisition will likely vary from the estimates developed at March 31, 2010.

As required by 18 C.F.R. Part 101, PPL will furnish the Commission with an update to these proposed journal entries within six months of the Transaction closing date, at which time PPL expects to have completed the detailed valuation studies related to the assets acquired and liabilities assumed. However, under generally accepted accounting principles in the U.S., PPL has up to twelve months to finalize its accounting entries associated with acquisition adjustments, which could result in additional adjustments made by PPL beyond the six month period described above.

See Appendix 4a and Appendix 4b for the Pro Forma Balance Sheets of KU and LG&E as of March 31, 2010. The journal entry to record the issuance of first mortgage bonds was not reflected in the pro forma balance sheets since that entry will not be made at the Transaction closing date.



**Kentucky Utilities Company**  
**Pro Forma Balance Sheet**  
**As of March 31, 2010**

	As Reported per FERC Form 3-Q	Eliminate E.ON AG Affiliate Debt	Establish PPL Affiliate Debt	Record Investment in EEInc	Recognize Fair Value of Debt	Record Goodwill	Reclassify Investment in EEInc from Acct 123 to Acct 123.1	As Adjusted
Utility Plant (101-106, 114)	4,918,175,948							4,918,175,948
Construction in Progress (107)	1,290,626,141							1,290,626,141
(Less) Accum. Prov. For Depr. Amort. Depl. (108, 110, 111, 115)	(2,192,542,471)							(2,192,542,471)
Nonutility Property (121)	179,121							179,121
Investments in Associated Companies (123)	15,146,402						(15,146,402)	-
Investments in Subsidiary Companies (123.1)	-			84,853,598			15,146,402	100,000,000
Other Investments (124)	250,000							250,000
Cash (131)	3,138,859	(1,331,000,000)	1,331,000,000					3,138,859
Working Fund (135)	39,530							39,530
Temporary Cash Investments (136)	269							269
Customer Accounts Receivable (142)	104,044,948							104,044,948
Other Accounts Receivable (143)	20,328,492							20,328,492
(Less) Accum. Prov. For Uncollectible Acct - Credit (144)	(3,267,013)							(3,267,013)
Accounts Receivable from Associated Companies (146)	383							383
Fuel Stock (151)	103,739,924							103,739,924
Plant Materials and Supplies (154)	31,152,075							31,152,075
Allowances (158.1 and 158.2)	812,054							812,054
Stores Expense Undistributed (163)	7,850,499							7,850,499
Prepayments (165)	6,803,416							6,803,416
Interest and Dividends Receivable (171)	18,742							18,742
Accrued Utility Revenues (173)	59,227,101							59,227,101
Miscellaneous Current and Accrued Assets (174)	44,024							44,024
Derivative Instrument Assets (175)	639,308							639,308
Unamortized Debt Expenses (181)	4,788,841							4,788,841
Other Regulatory Assets (182.3)	224,513,543							224,513,543
Prelim. Survey and Investigation Charges (Electric) (183.1)	2,337,967							2,337,967
Miscellaneous Deferred Debits (186)	40,006,280				282,000	378,785,000		419,073,280
Unamortized Loss on Required Debt (189)	12,833,348							12,833,348
Accumulated Deferred Income Taxes (190)	46,235,144			(33,008,000)				13,227,144
<b>TOTAL ASSETS</b>	<b>4,697,122,875</b>	<b>(1,331,000,000)</b>	<b>1,331,000,000</b>	<b>51,845,598</b>	<b>282,000</b>	<b>378,785,000</b>	<b>-</b>	<b>5,128,035,473</b>
Common Stock Issued (201)	(308,139,978)							(308,139,978)
Other Paid-in Capital (208-211)	(315,858,083)			(51,845,598)		(378,785,000)		(746,488,681)
(Less) Capital Stock Expense (214)	321,289							321,289
Retained Earnings (215, 215.1, 216)	(1,361,364,577)							(1,361,364,577)
Unappropriated Undistributed Subsidiary Earnings (216.1)	(10,671,369)							(10,671,369)
Bonds (221)	(350,779,405)				(282,000)			(351,061,405)
Advances from Associated Companies (223)	(1,298,000,000)	1,298,000,000	(1,298,000,000)					(1,298,000,000)
Accumulated Provision for Injuries and Damages (228.2)	(2,628,519)							(2,628,519)
Accumulated Provision for Pensions and Benefits (228.3)	(151,622,161)							(151,622,161)
Asset Retirement Obligations (230)	(34,894,604)							(34,894,604)
Accounts Payable (232)	(113,447,337)							(113,447,337)
Notes Payable to Associated Companies (233)	(61,143,954)	33,000,000	(33,000,000)					(61,143,954)
Accounts Payable to Associated Companies (234)	(59,261,068)							(59,261,068)
Customer Deposits (235)	(22,494,148)							(22,494,148)
Taxes Accrued (236)	(21,604,617)							(21,604,617)
Interest Accrued (237)	(929,309)							(929,309)
Tax Collections Payable (241)	(3,513,387)							(3,513,387)
Miscellaneous Current and Accrued Liabilities (242)	(19,627,675)							(19,627,675)
Derivative Instrument Liabilities (244)	(490,921)							(490,921)
Customer Advances for Construction (252)	(2,552,511)							(2,552,511)
Accumulated Deferred Investment Tax Credits (255)	(104,147,495)							(104,147,495)
Other Deferred Credits (253)	(16,999,296)							(16,999,296)
Other Regulatory Liabilities (254)	(49,627,319)							(49,627,319)
Accum. Deferred Income Taxes -Other Property (282)	(312,183,669)							(312,183,669)
Accum. Deferred Income Taxes -Other (283)	(75,462,762)							(75,462,762)
<b>TOTAL LIABILITIES AND STOCKHOLDER EQUITY</b>	<b>(4,697,122,875)</b>	<b>1,331,000,000</b>	<b>(1,331,000,000)</b>	<b>(51,845,598)</b>	<b>(282,000)</b>	<b>(378,785,000)</b>	<b>-</b>	<b>(5,128,035,473)</b>

**Louisville Gas & Electric Company**  
**Pro Forma Balance Sheet**  
**As of March 31, 2010**

	Eliminate E.ON					As Adjusted
	As Reported per FERC Form 3-Q	AG Affiliate Debt	Establish PPL Affiliate Debt	Recognize Fair Value of Debt	Record Goodwill	
Utility Plant (101-106, 114)	4,223,698,575					4,223,698,575
Construction in Progress (107)	327,974,292					327,974,292
(Less) Accum. Prov. For Depr. Amort. Depl.(108, 110, 111, 112)	(1,982,617,157)					(1,982,617,157)
Gas Stored Underground -Noncurrent (117)	2,139,990					2,139,990
Nonutility Property (121)	75,239					75,239
(Less) Accum. Prov. For Depr. Amort. (122)	(63,360)					(63,360)
Other Investments (124)	594,286					594,286
Other Special Funds (128)	14,727,363					14,727,363
Cash (131)	4,581,700	(485,000,000)	485,000,000			4,581,700
Special Deposits (132-134)	755,273					755,273
Working Fund (135)	20,130					20,130
Temporary Cash Investments (136)	120					120
Customer Accounts Receivable (142)	81,152,339					81,152,339
Other Accounts Receivable (143)	7,376,716					7,376,716
(Less) Accum. Prov. For Uncollectible Acct - Credit (144)	(2,760,784)					(2,760,784)
Accounts Receivable from Assoc. Companies (146)	15,709,235					15,709,235
Fuel Stock (151)	68,540,275					68,540,275
Plant Materials and Supplies (154)	29,661,158					29,661,158
Allowances (158.1 and 158.2)	3,980					3,980
Stores Expense Undistributed (163)	4,581,465					4,581,465
Gas Stored Underground -Current (164.1)	19,702,551					19,702,551
Prepayments (165)	7,494,347					7,494,347
Interest and Dividends Receivable (171)	38,313					38,313
Rents Receivable (172)	46,307					46,307
Accrued Utility Revenues (173)	48,126,164					48,126,164
Miscellaneous Current and Accrued Assets (174)	34,460					34,460
Derivative Instrument Assets (175)	7,368,738					7,368,738
Unamortized Debt Expenses (181)	3,807,607					3,807,607
Other Regulatory Assets (182.3)	318,835,263					318,835,263
Prelim. Survey and Investigation Charges (183.2)	882,697					882,697
Miscellaneous Deferred Debits (186)	1,232,875			6,279,000	238,215,000	245,726,875
Unamortized Loss on Required Debt (189)	22,843,399					22,843,399
Accumulated Deferred Taxes (190)	51,562,120					51,562,120
<b>TOTAL ASSETS</b>	<b>3,278,125,676</b>	<b>(485,000,000)</b>	<b>485,000,000</b>	<b>6,279,000</b>	<b>238,215,000</b>	<b>3,522,619,676</b>
Common Stock Issued (201)	(425,170,424)					(425,170,424)
Other Paid-in Capital (208-211)	(83,581,499)				(238,215,000)	(321,796,499)
(Less) Capital Stock Expense (214)	835,889					835,889
Retained Earnings (215, 215.1, 216)	(757,728,567)					(757,728,567)
Accumulated Other Comprehensive Income (219)	10,559,983					10,559,983
Bonds (221)	(574,304,000)			(6,279,000)		(580,583,000)
(Less) Required Bonds (222)	163,200,000					163,200,000
Advances from Associated Companies (223)	(485,000,000)	485,000,000	(485,000,000)			(485,000,000)
Accumulated Provision for Injuries and Damages (228.2)	(4,272,372)					(4,272,372)
Accumulated Provision for Pensions and Benefits (228.3)	(180,127,523)					(180,127,523)
Long-Term Portion of Derivative Instrument Liabilities	(10,216,681)					(10,216,681)
Long-Term Portion of Derivative Instrument Liabilities -Hedge	(18,856,113)					(18,856,113)
Asset Retirement Obligations (230)	(33,539,793)					(33,539,793)
Accounts Payable (232)	(75,243,599)					(75,243,599)
Notes Payable to Associated Companies (233)	(123,592,400)					(123,592,400)
Accounts Payable to Associated Companies (234)	(38,887,983)					(38,887,983)
Customer Deposits (235)	(23,505,026)					(23,505,026)
Taxes Accrued (236)	(21,251,713)					(21,251,713)
Interest Accrued (237)	(3,542,331)					(3,542,331)
Tax Collections Payable (241)	(1,312,063)					(1,312,063)
Miscellaneous Current and Accrued Liabilities (242)	(33,044,906)					(33,044,906)
Derivative Instrument Liabilities (244)	(15,667,190)					(15,667,190)
(Less) Long Term Portion of Derivative Instrument Liabilities	10,216,681					10,216,681
Derivative Instrument Liabilities - Hedges (245)	(18,856,113)					(18,856,113)
(Less) Long Term Portion of Derivative Instrument Liabilities	18,856,113					18,856,113
Customer Advances for Construction (252)	(9,391,872)					(9,391,872)
Accumulated Deferred Investment Tax Credits (255)	(47,400,905)					(47,400,905)
Other Deferred Credits (253)	(12,024,479)					(12,024,479)
Other Regulatory Liabilities (254)	(58,220,051)					(58,220,051)
Accum. Deferred Income Taxes -Other Property (282)	(383,213,534)					(383,213,534)
Accum. Deferred Income Taxes -Other (283)	(43,843,205)					(43,843,205)
<b>TOTAL LIABILITIES AND STOCKHOLDER EQUITY</b>	<b>(3,278,125,676)</b>	<b>485,000,000</b>	<b>(485,000,000)</b>	<b>(6,279,000)</b>	<b>(238,215,000)</b>	<b>(3,522,619,676)</b>