Exhibit One

Affidavit Of

Robert F. McCullough

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

The People of the State of Illinois, ex rel. LISA MADIGAN, Attorney General of the State of Illinois,

Complainant,

Docket No. EL07-

Exelon Generation Co., LLC, et al.

COUNTY OF MAUI

v.

STATE OF HAWAII

AFFIDAVIT OF ROBERT F. MCCULLOUGH

- 1. My name is Robert F. McCullough. My address is 6123 S.E. Reed College Place, Portland, Oregon. I am submitting this affidavit on behalf of the People of the State of Illinois.
- 2. I have worked in the electric and gas sectors for twenty-six years (see Appendix A). Since 2000, I have testified before Congress, state regulatory commissions, federal courts, and the Federal Energy Regulatory Commission in connection with investigations of Enron's trading practices and finances. My January 2002 testimony before the U.S. Senate Energy and Natural Resources Committee is credited with initiating FERC's investigation into Enron's activities in western electricity markets during 2000-2001.
- 3. I have been retained by the Office of the Illinois Attorney General to review materials relating to a fixed-price electricity auction conducted September 5–8, 2006, by Commonwealth Edison Company ("ComEd") and the Ameren companies (AmerenCIPS, AmerenCILCO and AmerenIP, collectively "Ameren"). My review has focused on confidential materials that the Office of the Illinois Attorney General obtained from the ICC. I have also reviewed the two public reports about the auction prepared for the Illinois Commerce Commission ("ICC") by the ICC Staff¹ and by auction manager NERA Economic

¹ "The September 2006 Illinois Auction: Post-Auction Public Report of the Staff," prepared by the Staff of the Illinois Commerce Commission with the assistance of Boston Pacific Company, Inc. (December 6, 2006) ("Staff Report").

Consulting.²

4. Based on my review of this material, discussed in detail below, I conclude:

- (a) The auction produced above-market prices: the auction clearing prices were approximately double the marginal cost of producing electricity to serve ComEd and Ameren customers and nearly 40% higher than prices in relevant bilateral markets. The premium over bilateral markets was \$4.3 billion, discounted, as of January 1, 2007³;
- (b) One bidder secured a virtual monopoly over the most valuable product in the auction: _______ one bidder, Exclon Generation Co., LLC ("ExGen"),

ultimately won 97%

of the 41-month ComEd contracts. ExGen also won the largest portion of the second most-valuable product (the 29-month ComEd contracts).

(c) There is evidence of market allocation through coordinated interaction by bidders in the auction:

The Auction

8.

5. In September 2006, ComEd and Ameren held a uniform-price, descending-clock auction in which electricity suppliers submitted bids over the Internet to supply 17-month, 29-month, and 41-month full-requirements products.

6. The products in the auction were broken into tranches (packages) of approximately 50 MW and associated energy. Under the auction rules, a bidder could provide up to 35% of the tranches needed to supply ComEd and up to 35% of the tranches needed to supply Ameren.

7. The starting price of the auction was set to solicit more bids than needed to supply ComEd and Ameren. In subsequent rounds, prices for each product were reduced until offers by bidders were just sufficient to meet the load to be served for each utility.

The ICC Staff Report⁴ summarizes the results of the auction as follows:

² "Public Report Presented to the Illinois Commerce Commission," prepared by NERA Economic Consulting, Illinois Auction Manager (December 6, 2006) ("NERA Report").

³ Calculated using market prices from the NYMEX Northern Illinois forward markets for September 8, 2006 and discounted at the discount rates from the ISDA for the same date. NYMEX forward prices were extrapolated for the final five months of the 41-month contracts using NYMEX Henry Hub natural gas prices for the same date.

⁴ Staff Report, at 6 and 8.

Start End		<u>Dat</u> Tue, 5 Se Fri, 8 Se	<u>te</u> ep 2006 ep 2006		<u>Time</u> 7:30 AM 11:30 AM	<u>Ro</u> I 3	<u>und</u> 1 19		
Purchasing Utility		ComEd			Ameren				
Load Category	101	CPP-B	1.1.1.1	CPP-A	BGS-FP		BGS-LFP	Total	
Product	17-mo	29-mo	41-mo	17-mo	17-mo	29-mo	41-mo	17-mo	
Peak load of Category (MW)		13,879	S	4,376	5.366		Sec. dite	1.853	25.474
Tranche size (% of peak load)		0.36%		1.14%	0.93%			2.70%	
Tranche size (approximate MW)	49.92		49.73	50.15		50.08			
Percent of load this auction		100%	1.1	100%		100%	44.6	100%	
Starting tranche target	92	93	93	88	35	36	36	37	510
Starting target (% of peak load)	33%	33%	33%	100%	33%	34%	34%	100%	
Final tranche target	92	93	93	88	35	36	36	37	510
Final target (% of peak load)	33%	33%	33%	100%	33%	34%	34%	100%	
Quantity procured (# tranches)	92	93	93	88	35	36	36	37	510
Percent of peak load procured	33%	33%	33%	100%	33%	34%	34%	100%	
# Winning bidders	10	8	4	8	3	4	3	5	16
Max tranches sold by any 1 bidder	27	38	89	37	24	15	18	12	138
Max tranches sold by any 1 bidder	128			1000.000	46			138	
Starting load cap (# tranches)	128			1.0	50				
Final load cap (# tranches)	128		1.000	50		Sile and			
Starting Price (\$/MWH)	100.0	100.0	100.0	104.0	100.0	100.0	100.0	104.0	-
Final price (\$/MWH)	63.96	64.00	63.33	90.12	64.77	64.75	66.05	84.95	

Fixed Price Auction Summary

Winning Bidders in the Auction

Section	Fixed Price							
Round Closed	39							
Customer Group	Small to Medium Large					rge		
Utility Group	(ComE	d		Amerer	1	ComEd	Ameren
Product	B 17	B 29	B 41	FP 17	FP 29	FP 41	A 17	LFP 17
Price (\$MWH)	63.96	64.00	63.33	64.77	64.75	66.05	90.12	84.95
Bidder / Tranches Won								
Ameren Energy Marketing Company				6	15	15		10
American Electric Power Service Corporation	3						5	2
Conectiv Energy Supply, Inc.		6	1				3	
Constellation Energy Commodities Group, Inc		3			10	18	22	12
DTE Energy Trading, Inc.	3	4				3	3	
Dynegy Power Marketing, Inc.				24	4			
Edison Mission Marketing & Trading, Inc.	19	22						
Energy America, LLC	4							
Exelon Generation Co., LLC		38	89				1	10
FPL Energy Power Marketing, Inc.	6						9	
J. Aron & Company	15	10		5				
J. P. Morgan Ventures Energy Corporation	27	4	1		7			
Morgan Stanley Capital Group, Inc.	6						37	3
PPL EnergyPlus, LLC	6	6	2					
Sempra Energy Trading Corp.							8	
WPS Energy Services, Inc.	3							
Sum of Tranches Won	92	93	93	35	36	36	88	37

<u>The Auction Produced Clearing Prices Substantially</u> <u>Above Marginal Cost</u>

- 9. I have reviewed the 2006 marginal cost study conducted by the Argonne National Laboratory and the University of Illinois.⁵ I have also reviewed the affidavit by Richard Cirillo of the Argonne National Laboratories submitted in this docket.⁶
- 10. Dr. Cirillo reports marginal costs that are significantly lower than clearing prices in the auction:

In most areas of the State, the LMPs were in the range of 20-28 \$/MWh for 90% of the time over the course of a year (i.e., for about 7,900 out of 8,760 hours). As shown on the expanded scale, about 5% of the time the higher loads caused LMPs to rise together due to a small amount of transmission congestion. For about 1% of the time (about 88 hours per year), the increasing transmission congestion caused LMPs to rise considerably and to vary significantly from zone to zone. LMPs across the State rose above 100 \$/MWh.⁷

- 11. Clearing prices in the auction ranged from \$63.33/MWh to \$90.12/MWh.⁸ These correspond to a weighted average of \$70.14/MWh.
- 12. The melded Locational Marginal Price value for Dr. Cirillo's study would be in the range of \$30.00/MWh to \$40.00/MWh approximately half the average clearing price of the auction.

<u>The Auction Produced Clearing Prices Substantially Above Prices in Bilateral</u> <u>Markets</u>

- 13. An exchange for forward contracts in electricity is offered by the New York Mercantile Exchange for Northern Illinois. Market prices are quoted both on the Internet and in industry newsletters. The market includes monthly prices – both on-peak and off-peak – for similar periods as the auction.
- 14. During the time period of the auction, NYMEX Northern Illinois prices were significantly lower than the clearing prices in the auction.
- 15. My analysis of bilateral prices from the NYMEX forward markets at the time of the auction shows that the price of a 17-month strip using weighted on-peak and

⁵ Evaluating the Potential Impact of Transmission Constraints on the Operation of a Competitive Market in Illinois, Argonne National Laboratories and the University of Illinois, April 2006.

⁶ Affidavit of Richard R. Cirillo, March 5, 2007.

⁷ Ibid., pages 4 and 5.

⁸ Public Report Presented to the Illinois Commerce Commission, NERA, December 6, 2006, page 2.

off-peak prices would be \$50.41/MWh. The price of a 29-month strip would be \$50.35/MWh. NYMEX only quotes prices until December 2009 on September 8, 2006. The price of a 41-month strip with the final five months extrapolated using Henry Hub natural gas forward prices is \$50.35/MWh.

16: This analysis shows that the auction clearing prices were almost 40% above prices in the bilateral markets at the time of the auction.

17. I have had extensive experience with large retail electricity contracts, beginning in the early 1980s, between Pacific Northwest utilities and large metals, chemicals, and paper firms that involved purchases from the spot market. Over the past twenty-five years, I have worked with marketers, utilities, and retail customers throughout the Pacific Northwest, Utah, California, Texas, Louisiana, Illinois, Kentucky, Maine, British Columbia, Alberta, and Quebec. Retail contracts do not normally contain large "premiums" over the market. Even retail customers with unusual operating characteristics, such as steel mini-mills, have not encountered the level of above-market premiums seen in the Illinois auction.

 Curiously, the customer class normally regarded as the least costly to serve – large industrial loads – commands the highest premium in the Illinois auction: \$31.14/MWh in the ExGen service territory and \$34.53/MWh in the Ameren service territory.⁹

19. The nature of the Illinois auction is the issuance of a "call" to existing retail customers. Retail customers can choose to stay on the service offered under the auction price – or not. When they do, they are calling on the winning bidders to provide electricity at a fixed price.

20. Avoiding the risks posed by the implicit call is not difficult. The primary problem is that the quantity of electricity in each tranche may change over time The simplest approach would be to supply the contract from spot supplies and accept the price risk. Counterparties were concurrently willing to offer forward contracts for comparable products at around \$50/MWh on average, bearing this same risk at a price \$30/MWh lower than prices from the auction.¹⁰

21. Alternatively, the winning bidder can simply hedge the entire tranche at about \$50/MWh and accept the risk of being forced to sell excess megawatt-hours on the spot market. In either case, suppliers can address the call using traditional risk management tools.

22. Price and quantity risk simply do not explain why the differential between marginal cost and market prices and the auction clearing prices is so large.

⁹ Staff Report at 17.

¹⁰ A detailed description of the NYMEX Northern Illinois Hub Financially Settled Electricity Futures contract can be found at http://www.nymex.com/UM_desc.aspx

A Lack of Competition Contributed to High Prices in the Auction

23.

HHI concentration ratios indicate that a lack of competition contributed to abovemarket clearing prices in the auction. The Web site of the U.S. Department of Justice (USDOJ) provides a description of HHI:

"HHI" means the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration.... The HHI takes into account the relative size and distribution of the firms in a market and approaches zero when a market consists of a large number of firms of relatively equal size. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases. Markets in which the HHI is between 1000 and 1800 points are considered to be moderately concentrated, and those in which the HHI is in excess of 1800 points are considered to be concentrated. Transactions that increase the HHI by more than 100 points in concentrated markets presumptively raise antitrust concerns under the Horizontal Merger Guidelines issued by the U.S. Department of Justice and the Federal Trade Commission.¹¹

24. Obviously, a successful auction should become more concentrated over time as less serious bidders drop out.

In a highly concentrated

market there is always a danger that a firm will exercise market power, driving the price well above marginal cost.

¹¹ "The Herfindahl-Hirschman Index." U.S. Department of Justice, http://www.usdoj.gov/atr/public/testimony/hhi.htm

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27. Previous evidence on market concentration in Illinois supports the hypothesis that competition might be insufficient to produce competitive prices. An analysis conducted by Dr. Kenneth Rose indicates HHI statistics for ComEd's Northern Illinois service territory ranging from 2,162 to 10,000 by generation segment.¹²

28. Overall, the Illinois auction produced high prices relative to marginal cost and prices in surrounding markets. The highest prices occur in products with concentration statistics substantially higher than Department of Justice guidelines. The surprisingly high prices and the evidence of concentration support a conclusion that the cause of the high premium over marginal cost and market prices was the lack of competition.

<u>One Bidder Secured a Virtual Monopoly</u> Over the Most Valuable Product in the Auction

29. ExGen **B41** (the 41-month ComEd contract), the single largest market in the auction.¹³ ExGen ultimately obtained over 95% of the B41 tranches available. Overall, ExGen claimed 89 out of 93 tranches in this product. In addition, ExGen received the largest portion of the second most valuable product – B29 (the 29-month ComEd contracts). In total, ExGen made successful bids up to the exact maximum it was allowed under the auction load cap.

¹² Direct Testimony of Kenneth Rose, Ph.D. in Illinois Commerce Commission Docket Number 05-0159, June 8, 2005.

¹³ One other product (B29) has as many megawatts, but B41 contains 41 months, an additional 12 months, meaning that the total sales in product B41 are significantly larger.

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31.

In this highly concentrated market, market division¹⁴ is possible even with a load cap designed to limit ExGen's dominance. ExGen owns nuclear plants in Northern Illinois with a capacity of 11,379 MW. Because of the load cap, ExGen can bid only a portion of that capacity into the auction. The remaining electricity can be sold to other bidders in the auction. In this case, ExGen could control the level of competition it might face by choosing which products to make available to other bidders through bilateral contracts prior to the auction. Given the limitation on ExGen's bids in the auction – the so-called "load cap" – it would be logical and in ExGen's self-interest for it to unilaterally limit its competitors' access to, and consequently their ability to compete for, the most valuable contracts in the auction (ComEd's 41-month contracts).

By any standard of market concentration, ExGen's dominance of this product is extreme.

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¹⁴ Market division takes place when suppliers either tacitly or expressly agree to limit competition. In the case of Northern Illinois, the dominating position of a single generator means that competitors must contract with a competitor in the same auction. The generator's decision on which products to sell to competitors provides a simple mechanism to divide the market.

ExGen received 38 tranches of the 93 B29 tranches awarded – approximately 40% of the total.

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35. In sum, Exelon Generation claimed approximately 50% of the total MWh awarded during the auction for service to its regulated affiliate's (ComEd) own service territory.

<u>There Is Evidence of Market Allocation Through Coordinated Interaction</u> <u>by Bidders in the Auction</u>

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38.

Could this situation be explained by external events? In other words, did prices in external markets change so markedly that they provided a better opportunity to profit than that offered by the Illinois auction? Did changes in fuel costs make participating in the Illinois auction a less attractive option? This would be unlikely based on data from NYMEX's Northern Illinois forward market (the blue lines in the graph below) and the NYMEX Henry Hub forward market (the red and orange lines in the graph below). In reality, activity in the alternative markets

Illinois Auction Energy Futures at NYMEX Northern Illino d Henry Hub \$67.50 \$9.60 \$9.50 \$57.00 \$9.40 \$66.50 \$9.30 \$66.00 \$9.20 \$85.50 \$9.10 SAWA (NYMEX N \$9.00 \$65.00 \$8.90 \$84.50 \$8.80 \$64.00 \$8.70 \$63.50 \$8.60 \$8.50 \$63.00 9/5/06 9/6/06 9/7/06 9/8/06 NYMEX Northern Illinois On-Peak 17 Month Strip NY MEX Northern Illinois On-Peak 29 Month Strip ----- Henry Hub 17 Month Strip ----Henry Hub 29 Month Strip

and the market for natural gas made participation in the Illinois auction more attractive over time:

39. On the last day of the auction,

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a form of market division between parties to the auction, is not difficult to envisage. When parties to the auction have a presence outside of the local geographic area of the auction, a variety of potential side agreements are possible:

- a. Since the ability of new entrants to this market is dependent upon purchases from existing suppliers, it is possible that the contracts might include "triggers" which would allow existing suppliers to terminate the contract under certain conditions. If such triggers were present, it would appear that purchasers were dropping out of the auction due to miniscule price changes whereas the actual situation was that they were withdrawing their bids as the triggers reduced their potential source of supply. Such partnership arrangements were characteristic of Enron's control of third-party generation in the WECC during the Western Market Crisis of 2000-2001.
- b. Quid pro quo arrangements outside the auction are another likely possibility. It is possible to make a departing bidder whole by simply agreeing to purchase the same energy in the bilateral market at favorable prices. Since the departure affects prices for all auction participants, an agreement to purchase the energy involved in an exit from the auction would be quite cost effective. Such partnership arrangements have been observed in other structured markets. A prime example is the cooperative bidding of Enron and Powerex in the "Project Stanley" market manipulation scheme in Alberta.
- c. A similar, although more difficult to detect, arrangement is to make a quid pro quo arrangement in a different geographic area. In this case, a departing bidder would be granted a lucrative contract elsewhere in the U.S. or Canada. This would be particularly easy if the departing bidder had been dependent on transmission of its bid from a neighboring RTO. Such an arrangement would benefit both parties by reducing the potential of expensive wheeling costs.
- 51. This completes my affidavit.

50.

Robert McCullough

Sawaii STATE OF OREGON County of Multinomah

This instrument was acknowledged before me on June_, 2007 McCullough.

SS.

INNININI A. No Notary Public for Oregon Hawen Public commission expires: 10/29 25/01

EXHIBIT TWO

Affidavit Of Richard R. Cirillo

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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The People of the State of Illinois, *ex rel.* Illinois Attorney General LISA MADIGAN,

Petitioner,

v.

Docket No. ER07-

Exelon Generation Co., LLC, et al.

Respondents.

SS.

AFFIDAVIT OF RICHARD R. CIRILLO

State of Illinois

County of DuPage

My name is Richard R. Cirillo. I am Director of the Decision and Information Sciences Division of Argonne National Laboratory. I served as the team leader for the study that produced the report *Evaluating the Potential Impact of Transmission Constraints on the Operation of a Competitive Market in Illinois*, which was commissioned by the Illinois Commerce Commission (ICC). The full report and appendices are available at:

http://www.icc.illinois.gov/docs/en/060613ecTransRpt.pdf , and http://www.icc.illinois.gov/docs/en/060613ecTransRptAppx.pdf , respectively.

The work was a joint effort between Argonne National Laboratory and the University of Illinois at Urbana-Champaign. The work was begun in June 2002 and a first draft report was submitted in December 2003. A second draft report was submitted in September 2004 and the report was finalized in April 2006. The time between the various versions of the report was spent addressing comments. The study focused on the electric power system in the State of Illinois as it might exist in 2007.

One part of the study dealt with calculating the marginal cost of production of electricity. There are several ways in which the "marginal cost of electricity" can be considered. The two used in the study were generator production costs and locational marginal prices

One of the results of the study was that the locational marginal prices, which include the effect of generator costs and transmission congestion, were in the range of 20-28 \$/MWh for 90% of the hours of the year. For 5% of the hours, they were in the range of 28-36 \$/MWh. Higher prices

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were experienced less than 5% of the hours. These results are described in more detail in the following paragraphs.

Generator Production Costs

The generator production costs are based on the cost to operate individual generation facilities. In the study, a total of 237 individual generators were included. Generator costs were developed for each individual unit. Table 4.1-1 from the report shows the range of data for the different types of generators that were included in the study.

Generating Unit Type	Unit Sizes (MW)	Fuel Cost (\$/MMBtu)	Variable Operating and Maintenance Cost (\$/MWh)	Total Variable Operating Cost ^a (\$/MWh)	Fixed Operating and Maintenance Cost (\$/kW-m)	Shutdown & Startup Cost ^b (\$1,000 per cycle)
Nuclear	828-1,225	0.43-0.47	3.0-8.0	8.3-13.1	1.3-4.0	56.9-87.2
Bituminous Coal (<100 MW)	22–81	1.18	2.0-6.4	16.2–24.1	0.5-4.0	1.6–5.9
Bituminous Coal (>100 MW)	109–635	1.18	0.9–4.5	13.0–18.6	0.5–1.9	7.0–45.6
Sub-bituminous Coal	120–893	1.18	0.9–4.5	12.8–16.9	1.0-2.0	7.2–47.6
Oil-Fired Steam Units	46–210	3.97	1.6–3.0	47.5-48.5	0.5–0.7	2.2-10.2
Natural Gas- Fired Steam Units	50–545	2.89	0.6–0.9	41.1–50.0	0.4–0.8	7.5–67.2
Natural Gas- Fired Combined Cycle	250-300	2.89	0.5	20.824.6	1.2	17.8–21.1
Natural Gas- Fired Gas Turbines	10–172	2.89	0.0-4.4	25.8–71.2	0.0-4.8	0.0-0.4
Gas Turbines (Diesel-Fired)	13–57	4.87	0.0–3.0	45.0-93.0	0.0-0.5	0.0-0.2
Jet Engines	22-38	5.36	0.0-1.6	80.7-129.3	0.0-0.4	0.00.3

Table 4.1-1 PC Case – Range of Generator Cost Parameters

^a Includes fuel cost calculated from unit heat rate and variable operating and maintenance cost ^b For cold start.

In the Production Cost (PC) Case included in the study, generators were offered for dispatch to meet load requirements at their "production cost." Two variations of production cost were used. Under what was termed "Case Study Assumptions", the generator production cost included the fuel cost, the variable operating and maintenance cost, and the fixed operating and maintenance cost. Under what was termed the "Conservative Assumptions", the production cost included only the fuel cost and the variable operating and maintenance cost. Under both sets of assumptions, the production cost did not include any amortization of capital costs or any other cost items (e.g., taxes, royalties, etc.). For the study, there was insufficient data available to include capital amortization as part of the analysis.

Locational Marginal Prices

There is a wide variation in the generator costs resulting from variations in fuel costs and

variations in generator efficiencies (also referred to as heat rates). In general, the electric system is operated in a way that uses the lowest cost generators first and uses the highest cost generators only during peak load periods. Since the load on the system varies considerably over a day and over seasons, the marginal cost of providing electricity also varies over the same time periods. In addition, because of transmission constraints, the marginal cost of providing electricity can vary considerably at different points in the transmission network.

The locational marginal price (LMP), expressed in \$/MWh, is defined as the cost of serving one additional MW of load at any point in the transmission network. It is another measure of what is termed the marginal cost of electricity. The LMP has three components: (1) the marginal cost to produce the last MW of power, (2) a transmission congestion charge, and (3) the cost of marginal transmission losses. In situations where there is no transmission congestion, LMPs at all buses in the transmission network are similar, varying only by a relatively small amount to cover marginal transmission losses. In an uncongested state, generating units can be dispatched according to an economic merit order without overloading transmission lines and violating security measures. The economic merit ordering of units or blocks of units is typically based on generator production costs such that generators that are the least expensive to operate are dispatched first while the most expensive units are utilized only during times of the highest demand. However, the actual dispatch of units must often deviate from the economic merit order to keep the transmission system operating within a stable and secure state. This change in the order of dispatch of units when transmission congestion occurs leads to variations in LMPs across a region. In some cases, the variation in LMPs among network nodes can be significant.

For the study, the configuration of the power system in Illinois in the analysis year was constructed from the 2003 summer case prepared by the North American Electric Reliability Council (NERC). Data on load growth, generator additions and retirements, and transmission system changes were added to bring the system up to what might be expected in the analysis year of 2007. The NERC case, which covers the entire eastern interconnection of the U.S., includes about 1,900 buses and 2,650 branches in Illinois. All of the analyses were done using this detailed transmission configuration for the State. For the analysis, the buses in Illinois were grouped into zones. In addition to the in-state transmission configuration, the power transfers into and out of the State were accounted for. All of the tie lines between Illinois and surrounding States were identified and aggregated into a small set of interconnection points. The interconnection points covered an area including Indiana, Michigan, and parts of Ohio in the east, Tennessee in the south, parts of Missouri served by Ameren and AECI utilities in the southwest, Iowa and parts of Minnesota in the west, and Wisconsin in the north. The individual tie lines between Illinois and these states were represented explicitly. This allowed the physical limits of power flows between in-state and out-of-state nodes to be represented. Using this transmission system configuration, the LMPs were calculated for each bus in the State for each of 8,760 hours of the analysis year.

Using the LMPs as a measure, the marginal cost of electricity varies by hour and by location in the transmission network. Figure 4.1.4-2 from the study shows a frequency distribution of load-weighted LMPs in each zone for the Production Cost Case using the Case Study assumptions. In most areas of the State, the LMPs were in the range of 20-28 \$/MWh for 90% of the time over the course of a year (i.e., for about 7,900 out of 8,760 hours). As shown on the expanded scale,

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about 5% of the time the higher loads caused LMPs to rise together due to a small amount of transmission congestion. For about 1% of the time (about 88 hours per year), the increasing transmission congestion caused LMPs to rise considerably and to vary significantly from zone to zone. LMPs across the State rose above 100 \$/MWh. This distribution shows that, in general, the hours where high LMPs would be experienced are relatively few under PC case conditions; however, during these hours, the LMPs can be significantly higher and can show wide variability across the State.

Under the Conservative Assumptions the LMPs statewide are measurably lower than under the Case Study Assumptions. They were in the range of 13-16 \$/MWh for most hours with the highest values at about 80 \$/MWh.

It should be noted that the LMPs computed here account for the cost of electricity generation and the transmission congestion costs. Costs for distribution services were added separately in the study and are not shown on these figures.

Modeling Approach

Two different models were used in this study: EMCAS, developed by Argonne National Laboratory and PowerWorld, developed by the University of Illinois. Both used a DC Optimal Power Flow (DCOPF) methodology to calculate load flows and LMPs. This is a standard method in the power industry. The EMCAS simulation of the transmission network included all buses in Illinois, all tie lines to systems outside Illinois, and a simplified representation of the out-of-state generation and load. The PowerWorld simulation extended the detailed representation of the transmission system to include more than 12,900 transmission buses and more than four times the generation capacity that is in Illinois. As documented in the Appendix to the report, both models showed very similar results in the LMP calculations.

Data

The data used in the study were assembled in the period 2002-2003. Key data inputs included current and planned generators, generator retirements, fuel costs, the configuration of the transmission network including modifications, and loads. The best information available at the time was used.

One of the most significant changes in information that could impact the results is the price of fuels. Comparing the current fuel prices from the U.S. Energy Information Administration (EIA) and those assumed in the study shows that nuclear fuel prices are virtually identical (EIA 2007) and coal prices are about 6% higher than what was assumed (currently 1.25 \$/MMBtu versus an assumption in the study of 1.18 \$/MMBtu [for 2006, EIA]). Natural gas prices have shown the biggest change from the study assumptions. The study used gas prices projected by EIA of 2.89 \$/MMBtu. Current natural gas prices for electricity generation are reported to be 6.30 \$/MMBtu (for September 2006, EIA). Despite this difference, natural gas generation accounted for only about 2% of the annual generation in the State since the majority of the generation is provided by coal and nuclear units. Thus, the difference would be important only in the peak load hours when the gas units are dispatched.



Figure 4.1.4-2 PC Case (Case Study Assumptions) Frequency Distribution of Load-Weighted LMPs by Zone

The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Retrand K. Cuillo

Name of Affiant

SUBSCRIBED AND SWORN to before me This 5^{μ} day of <u>March</u> 2007.

Sibles MOUCON Q. NOTARY PUBLIC

My commission expires:

December 12, 2010



EXHIBIT THREE

Affidavit Of Jonathan G. Koomey, PH.D.

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

The People of the State of Illinois, *ex rel.* Illinois Attorney General LISA MADIGAN,

Petitioner,

Exelon Generation Co., LLC, et al.

Respondents.

SS.

AFFIDAVIT OF JONATHAN G. KOOMEY, PH.D.

Docket No. ER07-

State of California

County of Alameda

My name is Jonathan Koomey. I am a Consulting Professor at Stanford University and a Staff Scientist at Lawrence Berkeley National Laboratory. Much of my research involves analyzing and comparing the costs of energy technologies for policy analysis and utility planning purposes. I hold M.S. and Ph.D. degrees from the Energy and Resources Group at the University of California at Berkeley, and a B.A. in History of Science from Harvard University. I am the author or coauthor of eight books and more than one hundred and fifty articles and reports on energy efficiency and supply-side technologies, energy economics, energy policy, environmental externalities, and global climate change.

I recently completed an article assessing historical costs for the entire U.S. nuclear fleet, on a reactor-by-reactor basis. That assessment contains data about the net generation (billion kWh) and operation and maintenance (O&M) costs (\$/MWh) for the nuclear plants owned by Exelon Nuclear in Illinois for the year 2004. It also estimates fuel costs (\$/MWh) for those reactors in that same year.

Table 1 below shows those data and estimates. The net generation data are used to calculate weighted averages for the total O&M costs (both fixed and variable), fuel costs, and the sum of those costs. The fuel costs contain \$0.1/MWh paid by all U.S. nuclear plants to account for the cost of waste disposal.

	2004 Net	2004 Total O&M	2004 Evel costs	2004 O&M + fuel
Reactor	Billion kWh	2004 \$/MWh	2004 \$/MWh	2004 \$/MWh
Devidence d 1	0.9	10.5	4.7	17.0
Braidwood 2	10.2	12.5	4.7	17.2
Byron 1	10.4	12.8	4.7	17.5
Byron 2	9.6	12.8	4.6	17.4
Clinton	8.0	13.9	4.6	18.5
Dresden 2	5.9	14.2	4.8	19.0
Dresden 3	6.4	14.2	4.8	19.0
LaSalle 1	9.1	12.7	4.8	17.5
LaSalle 2	9.9	12.7	4.9	17.5
Quad Cities 1	6.5	13.8	4.7	18.5
Quad Cities 2	6.2	13.8	4.7	18.5
Total/Wtd average	92.0	13.1	4.7	17.8

Table 1: O&M and fuel costs for Exelon Nuclear Illinois reactors in 2004

(1) Net generation is from the International Atomic Energy Agency. O&M costs by reactor, thermal efficiency by reactor, and national average fuel costs are from the Nuclear Energy Institute.

(2) O&M costs include both fixed and variable O&M.

(3) Fuel costs are based on national average costs per MWh, adjusted to reflect variations in thermal efficiency of each reactor compared to the average. Fuel costs also include \$0.1/MWh waste disposal fee.
(4) Weighted average O&M and fuel costs are calculated using net generation by plant.

The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Jonathan Koomey SUBSCRIBED AND SWORN to before me This 2d day of March, 2007 NOTARY PUBLIC My commission expires: March 25 2007



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EXHIBIT FOUR

Affidavit Of Scott J. Rubin (Commonwealth Edison Small Customer Bill Impacts)

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

The People of the State of Illinois, *ex rel.* Illinois Attorney General LISA MADIGAN,

Petitioner,

Exelon Generation Co., LLC, et al.

Respondents.

AFFIDAVIT OF SCOTT J. RUBIN

SS.

Docket No. ER07-

Commonwealth of Pennsylvania

County of Snyder

My name is Scott Rubin. I am an independent consultant and an attorney whose practice is limited to issues involving the public utility industries. My clients include state utility commissions, public advocates, state attorneys general, small businesses, labor unions, local governments, research foundations, utility industry trade associations, among others. Recently, I appeared as a witness on behalf of the People of the State of Illinois in proceedings before the Illinois Commerce Commission ("Commission") involving Commonwealth Edison Company ("ComEd").¹

I have evaluated the effect on residential customers of the rates that became effective for ComEd on January 2, 2007.² Increases in residential customers' bills will be in the range of **26% to 56%** during the winter of 2007. Increases of this magnitude, particularly in the middle of the winter heating season, are likely to have a serious impact on many residential customers, particularly those who live on fixed or limited incomes. In my opinion, increases of this magnitude will cause irreparable harm to tens of thousands of residential consumers. The following table summarizes these impacts.

	Electric Bill Increases	Median Household Income
Electric Heating Customers	43% to 56%	\$32,318
Non-Heating Customers	26% to 28%	\$50,659

In other words, the group of customers with the <u>lowest incomes</u> will be forced to bear the <u>highest</u> rate increases. Those increases will come in the middle of the winter heating season and will pose a serious risk to the health and safety of tens of thousands of low-income residents in ComEd's service territory.

My conclusions are based on the following:

- 1. A ComEd residential customer is classified into one of four groups, depending on (a) whether the customer lives in a "single-family" (one or two units) or "multi-family" (three or more units) building, and (b) whether the customer uses electricity for space heating in the winter.
- 2. The average residential customer in a single-family building uses 823 kilowatt-hours (KWH) of electricity in January if he/she is a non-heating customer, and 3,815 KWH in January if he/she is a heating customer. Comparable figures for the months of February and March are 709 and 690 KWH for non-heating customers and 3,241 and 2,538 KWH for heating customers.³
- 3. The same document shows that the average multi-family residential customer uses 359 KWH (non-heating) or 1,912 KWH (heating) in January. Comparable figures for the months of February and March are 309 and 310 KWH for non-heating customers and 1,636 and 1,323 KWH for heating customers.
- 4. I calculated the bills for the average residential customer under the ComEd rates that were in effect during January-March 2006 and compared them to the bills under the rates that ComEd will charge during January-March 2007. The results are:
 - a. For a single-family, non-heating customer the total bill for January through March 2006 was \$184.13. A customer with the same usage during January through March 2007 will pay \$235.44, an increase of \$51.31, or **27.9%**.
 - b. For a single-family, heating customer the total bill for January through March 2006 was \$434.12. A customer with the same usage during January through March 2007 will pay \$675.77, an increase of \$214.65, or **55.7**%.
 - c. For a multi-family, non-heating customer the total bill for January through March 2006 was \$89.75. A customer with the same usage during January through March 2007 will pay \$113.05, an increase of \$23.30, or **26.0**%.
 - d. For a multi-family, heating customer the total bill for January through March 2006 was \$245.19. A customer with the same usage during January through March 2007 will pay \$350.72, an increase of \$105.53, or **43.0%**.
- 5. ComEd has approximately 2,137,000 single-family non-heating customers; 36,000 single-family heating customers; 960,000 multi-family non-heating customers, and 152,000 multi-family heating customers.⁴
- 6. Approximately 180,000 ComEd customers face electric bill increases of more than 40% in the winter of 2007, compared to what their bills would be if ComEd's existing rates remained in effect. Most of those customers will see increases in the range of \$35 to \$75 per month during the winter.

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- 7. More than 20% of all households in Chicago had an annual income of less than \$15,000 in 2005.⁵
- 8. More than 21% of all people in Chicago (and 31% of all children in the city) live in households with incomes below the federal poverty level.⁶
- 9. Homes in Northern Illinois that use electricity for heat tend to be occupied by lowerincome households. In Northern Illinois, households that use electricity as their primary source of heat had a median income of \$32,318 in 2003. This income level is <u>36% lower</u> than the median income of all other households in Northern Illinois (\$50,659).⁷
- 10. More than 76,000 homes in Northern Illinois that use electricity for heating had annual incomes of less than \$15,000 in 2003.⁸
- 11. Increases in electric bills of \$35 to \$75 per month will have a severely negative impact on low-income and fixed-income families.
- 12. Increases of this magnitude in electricity costs will cause irreparable harm to the health and safety of affected customers who live on fixed or limited incomes. Government studies and other researchers have documented the serious tradeoffs that low- and fixedincome families must make when energy costs increase, particularly during the winter. The tradeoffs include foregoing needed medical care, food, telephone service, child care, and other necessities.⁹

I conclude, therefore, that in the winter of 2007 ComEd's residential customers will face bill increases in the range of **26% to 56%** compared to the bills customers would receive if the 2006 rates remained in effect. Such changes are likely to cause irreparable harm to many residential customers, particularly the tens of thousands of customers in ComEd's service area whose incomes are below the federal poverty level and who use electricity for space heating.

The foregoing statements are true and correct to the best of my knowledge, information, and belief.

SUBSCRIBED AND SWORN to before me this 23 day of February, 2007.

Me Alym

My commission expires:

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Leslie A. McGlynn, Notary Public Selinsgrove Boro, Snyder County My Commission Expires May 9, 2009

Member, Pennsylvania Association of Notaries

Endnotes

¹ ICC Docket No. 05-0597 and ICC Docket No. 06-0411.

² I considered the impact of Commission-approved changes in ComEd's distribution rates and energy supply charges.

³ ICC Docket No. 05-0597, ComEd Schedule E-7(b)(3)(A)(B)

⁴ <u>Id.</u>

⁵ U.S. Census Bureau, 2005 American Community Survey, Chicago City, Illinois, accessed through the Factfinder application at < http://factfinder.census.gov >.

⁶ <u>Id.</u>

⁷ U.S. Census Bureau, Current Housing Reports, Series H170/03-22, American Housing Survey for the Chicago Metropolitan Area: 2003 (Dec. 2004), Table 2-20. The study area includes the following counties: Cook, Dupage, Grundy, Kane, Kendall, Lake, McHenry, and Will.

⁸ ld.

⁹ Bauman, Kurt, Direct Measures of Poverty as Indicators of Economic Need: Evidence from the Survey of Income and Program Participation, U.S. Census Bureau Population Division Technical Paper No. 30 (1998); Bauman, Kurt, *Extended Measures of Well-Being: Meeting Basic Needs*, U.S. Census Bureau Current Population Reports, P70-67 (1999); Boushey, Heather, et al., *Hardships in America: The Real Story of Working Families* (Economic Policy Institute, 2001); Edin, Kathryn and Laura Lein, *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work* (Russell Sage Foundation, 1997); Energy CENTS Coalition, *Minnesota's Energy Gap: Unaffordable Energy and Low Income Minnesotans* (1999); Mercier, Joyce, et al., *Iowa's Cold Winters: LIHEAP Recipient Perspective* (Iowa Dept. of Human Rights, 2000).

EXHIBIT FIVE

Affidavit Of Kristav M. Childress (Commonwealth Edison Large Customer Bill Impacts)

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

The People of the State of Illinois, *ex rel.* Illinois Attorney General LISA MADIGAN

Petitioner,

Exelon Generation Co., LLC, et al

v.

Respondents.

Docket No. ER07-

AFFIDAVIT OF KRISTAV M. CHILDRESS

COUNTY OF COOK

STATE OF ILLINOIS

AFFIDAVIT OF KRISTAV M. CHILDRESS

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The undersigned, Kristav M. Childress, being first duly sworn on oath, hereby deposes and states that:

1. My name is Kristav M. Childress. I am Technical Director of GEV Corp. ("GEV"). Our business address is 360 N. Michigan Ave., Suite 1005, Chicago, Illinois 60601.

2. GEV is a consulting firm that specializes in analyzing electricity tariffs for businesses and governmental agencies.

3. Using a consumer's historical electricity load profile, GEV evaluates the costs to the consumer of charges under electricity tariffs using a computer model. I personally have analyzed electricity charges for more than a thousand electricity accounts.

4. Recently, I appeared as a witness on behalf of the Building Owners and Managers Association of Chicago before the Illinois Commerce Commission ("Commission") in Docket Nos. 05-0159 and 05-0597 involving Commonwealth Edison Company ("ComEd").

5. I have evaluated the effects of ComEd's new rates for "large" customers (400 kilowatts to 3 megawatts of peak demand) established by ComEd's fixed price electricity supply auction on a random sample of these customers. Electric service to these customers has not been declared competitive.

6. My comparison of annual charges for ComEd electricity supply and delivery to thirty-six (36) "large" customers shows that ComEd's new rates result in an average annual increase of 72% for these customers. Percentage increases for the individual customers in my sample ranged from 35% to 109%.

7. I selected the 36 customers used in my study at random from GEV's customer database, which includes electricity load profiles for over one thousand accounts in the ComEd service territory.

8. I also have reviewed the September 2006 Illinois Auction Post-Auction Public Report of the Staff of the Illinois Commerce Commission dated December 6, 2006 (the "Commission Staff Post-Auction Report"), and in particular the table captioned "Comparison of Rates Pre-Restructuring, Current, and 2007" on page 23 of the Commission Staff Post-Auction Report (the "Commission Staff Rate Comparison Table").

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9. The Commission Staff Rate Comparison Table shows that all customers in ComEd's Large Load rate class (400 kilowatts to 1 megawatt) and ComEd's Very Large Load rate class (1 megawatt to 3 megawatts) are experiencing the average annual increases set forth below under the new rates established by ComEd's fixed price electricity supply auction:

	Cents/kilow	% Change	
	Current	New	From Current
Large Load (400 kilowatts-1 megawatt)	6.86	11.27	64.2%
Very Large Load (1-3 megawatts)	6.54	11.19	71.1%

Further Affiant sayeth not.

Dated: March 1, 2007

Kristav M. Childress

SUBSCRIBED AND SWORN to before me this 1st day of March, 2007.

N NOTARY PUBLIC

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My commission expires:

OFFICIAL SEAL PAUL G NEILAN NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES:03/01/08

EXHIBIT SIX

Affidavit Of Scott J. Rubin (Ameren Small Customer Bill Impacts)

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

The People of the State of Illinois, *ex rel*. Illinois Attorney General LISA MADIGAN,

Petitioner,

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Docket No. ER07-

Exelon Generation Co., LLC, et al.

Respondents.

AFFIDAVIT OF SCOTT J. RUBIN

SS.

Commonwealth of Pennsylvania

County of Snyder

My name is Scott Rubin. I am an independent consultant and an attorney whose practice is limited to issues involving the public utility industries. My clients include state utility commissions, public advocates, state attorneys general, small businesses, labor unions, local governments, research foundations, utility industry trade associations, among others. Recently, I appeared as a witness on behalf of the People of the State of Illinois in proceedings before the Illinois Commerce Commission ("Commission") involving Central Illinois Light Company ("CILCO"), Central Illinois Public Service Company ("CIPS"), and Illinois Power Company ("IP") (collectively "Ameren").¹

Using the most up-to-date data available, I have evaluated the effect on residential customers of the new rates that took effect on January 2, 2007.² Using this updated data, residential electric bills will increase in the range of **49% to 125%** during the winter (January through March) of 2007, compared to the rates that were in effect during the same three months of 2006. Changes of this magnitude, particularly in the middle of the winter heating season, are likely to have a serious impact on many residential customers, particularly those who live on fixed or limited incomes. In my opinion, increases of this magnitude will cause irreparable harm to thousands of residential consumers. The following table summarizes these impacts.

	Range of Bill Increases
Electric Heating Customers	88% to 125%
Non-Heating Customers	49% to 80%

My conclusions are based on the following:

- 1. The typical Ameren residential customer uses approximately 850 kilowatt-hours (KWH) of electricity in January, 750 KWH in February, and 650 KWH in March if he/she does not have electric space heating (the average IP non-heating customer uses approximately 100 KWH less than this in each month). The typical Ameren customer that has electric space heating uses approximately 2,000 KWH in January and February, and approximately 1,500 KWH in March.³
- 2. I calculated the bills for the first three months of 2007, compared to the bills that would have been issued for the same consumption for the first three months of 2006, for the typical residential customer in each of Ameren's four Illinois service areas (CIPS is divided into two separate rate areas) under Ameren's existing rates and the rates that took effect on January 2, 2007, including a change in transmission service rates that became effective on February 1, 2007. The results (expressed as three-month totals) are:
 - a. In CILCO, the typical heating customer's bills would increase from \$290.62 to \$545.38, an increase of \$254.76 or 87.7%. For a typical non-heating customer, the bills would increase from \$159.47 to \$264.48, an increase of \$105.01 or 65.9%.
 - b. In the main CIPS service area, the typical heating customer's bills would increase from \$261.65 to \$520.01, an increase of \$258.36 or 98.7%. For a typical non-heating customer, the bills would increase from \$171.48 to \$256.09, an increase of \$84.61 or 49.3%.
 - c. In the CIPS service area known as CIPS-ME, the typical heating customer's bills would increase from \$231.01 to \$520.01, an increase of \$289.00 or 125.1%. For a typical non-heating customer, the bills would increase from \$142.51 to \$256.09, an increase of \$113.58 or 79.7%.
 - d. In IP, the typical heating customer's bills would increase from \$254.75 to \$550.33, an increase of \$295.58 or 116.0%. For a typical non-heating customer, the bills would increase from \$155.69 to \$243.56, an increase of \$87.87 or 56.4%.
- 3. Ameren has approximately 1 million residential customers in Illinois, at least 10% of whom use electricity for space heating.
- 4. At least 100,000 Ameren customers face electric bill increases of more than 88% for the early 2007 winter heating season, compared to what their bills would be if Ameren's existing rates remained in effect. Many of those customers will see increases of more than 100%. In terms of dollars, most of those customers will see increases in the range of \$85 to \$95 per month during the winter.
- 5. Increases in electric bills of \$85 to \$95 per month will have a severely negative impact on low-income and fixed-income families.
- 6. Increases of this magnitude in electricity costs will cause irreparable harm to the health and safety of affected customers who live on fixed or limited incomes. Government

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studies and other researchers have documented the serious tradeoffs that low- and fixedincome families must make when energy costs increase, particularly during the winter. The tradeoffs include foregoing needed medical care, food, telephone service, child care, and other necessities.⁴

I conclude, therefore, that in the first three months of 2007, Ameren's residential customers will face bill increases in the range of **49% to 125%** compared to the bills customers would receive if they paid the same rates that were charged in the first three months of 2006. Such changes are likely to cause irreparable harm to many residential customers, particularly those on low or fixed incomes and who use electricity for space heating.

The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Scott J. Rubin

SUBSCRIBED AND SWORN to before me this <u>3</u> day of February, 2007.

NOTARY PUBLIC

My commission expires:

COMMONWEALTH OF PENNSYLVANIA Notarial Seal

Leslie A. McGlynn, Notary Public Selinsgrove Boro, Snyder County My Commission Expires May 9, 2009 Member, Pennsylvania Association of Notaries

Endnotes

¹ ICC Docket Nos. 06-0070, 06-0071, 06-0072, and 06-0448.

² I considered the impact of Commission-approved changes in Ameren's energy supply charges and the effect of the recent Commission order setting new distribution rates for Ameren. All of the rates I used were taken directly from Ameren's web site < http://www.ameren.com > on February 16, 2007.

³ ICC Docket Nos. 06-0070, et al., AG Exhibits 2.2 and 2.4.

⁴ Bauman, Kurt, Direct Measures of Poverty as Indicators of Economic Need: Evidence from the Survey of Income and Program Participation, U.S. Census Bureau Population Division Technical Paper No. 30 (1998); Bauman, Kurt, *Extended Measures of Well-Being: Meeting Basic Needs*, U.S. Census Bureau Current Population Reports, P70-67 (1999); Boushey, Heather, et al., *Hardships in America: The Real Story of Working Families* (Economic Policy Institute, 2001); Edin, Kathryn and Laura Lein, *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work* (Russell Sage Foundation, 1997); Energy CENTS Coalition, *Minnesota's Energy Gap: Unaffordable Energy and Low Income Minnesotans* (1999); Mercier, Joyce, et al., *Iowa's Cold Winters: LIHEAP Recipient Perspective* (Iowa Dept. of Human Rights, 2000).

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EHIBIT SEVEN

Affidavit Of Kristav M. Childress (Ameren Large Customer Bill Impacts)

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

The People of the State of Illinois, *ex rel.* Illinois Attorney General LISA MADIGAN

Petitioner,

Exelon Generation Co., LLC, et al

v.

Respondents.

AFFIDAVIT OF KRISTAV M. CHILDRESS

Docket No. ER07-

COUNTY OF COOK

STATE OF ILLINOIS

AFFIDAVIT OF KRISTAV M. CHILDRESS

)

)

The undersigned, Kristav M. Childress, being first duly sworn on oath, hereby deposes and states that:

1. My name is Kristav M. Childress. I am Technical Director of GEV Corp. ("GEV"). Our business address is 360 N. Michigan Ave., Suite 1005, Chicago, Illinois 60601.

2. GEV is a consulting firm that specializes in analyzing electricity tariffs for businesses and governmental agencies.

3. Using a consumer's historical electricity load profile, GEV evaluates the costs to the consumer of charges under electricity tariffs using a computer model. I personally have analyzed electricity charges for more than a thousand electricity accounts.

4. I have reviewed the September 2006 Illinois Auction Post-Auction Public Report of the Staff of the Illinois Commerce Commission dated December 6, 2006 (the "Commission Staff Post-Auction Report"), and in particular the table captioned "Comparison of Rates Pre-Restructuring, Current, and 2007" on page 23 of the Commission Staff Post-Auction Report (the "Commission Staff Rate Comparison Table").

5. The Commission Staff Rate Comparison Table shows that customers in AmerenIP's, AmerenCIPS's and AmerenCILCO's Large General rate classes (over 1 megawatt of peak demand) are experiencing the average annual rate increases set forth below under the new rates established by Ameren's fixed price electricity supply auction:

	Cents/kilow	% Change	
· · · · · · · · · · · · · · · · · · ·	Current	New	from Current
AmerenIP	4.71	8.92	89.6%
AmerenCIPS	3.92	9.05	130.7%
AmerenCILCO	5.00	8.98	79.7%

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Electric service by AmerenIP, AmerenCIPS and AmerenCILCO to Large 1 6. General (over 1 megawatt) customers has not been declared competitive.

Further Affiant sayeth not.

Dated: March 1, 2007

Kristav M. Childres

SUBSCRIBED AND SWORN to before me this 1st day of March, 2007.

m NOTARY PUBLIC

My commission expires:

OFFICIAL SEAL PAUL G NEILAN NOTA UBLIC - STATE OF LUNOIS 03/01/08